

2010

产品目录

ROHM
SEMICONDUCTOR

Discrete Semiconductors

Schottky Barrier Diodes Zener Diodes

肖特基势垒二极管/齐纳二极管



ROHM Co.,Ltd.

肖特基势垒二极管

RSX系列凭借ROHM开发的独家精细加工以及元件构造，实现了具有低 V_F 且低 I_R 。其注重高效率，低功耗，高可靠性的设计在市场上获得了好评，并占据了很高的市场份额。

RB系列拥有庞大的生产量，广泛地应用于民生，工业设备以及车载。产品分为表面安装封装/插件封装。

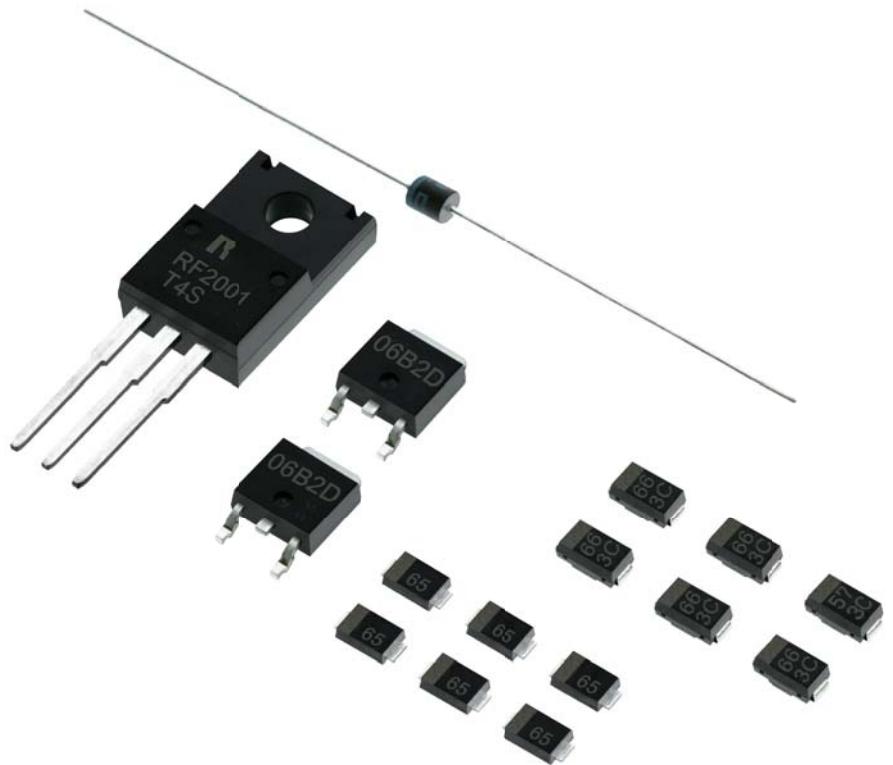
ROHM备有丰富多样的封装，从业界最小级别的0603(0201)规格的GMD2封装到TO220封装，一应俱全。

齐纳二极管

以业界最小级别的0603(0201)规格的GMD2封装为首，我们拥有丰富多样的封装。生产量庞大，广泛地应用于民生、工业设备以及车载。

低容量的齐纳二极管凭借ROHM独家元件构造，实现了超低容量化(Typ:0.3pF)。最适合用于USB2.0等所有高速通信线的ESD浪涌保护。

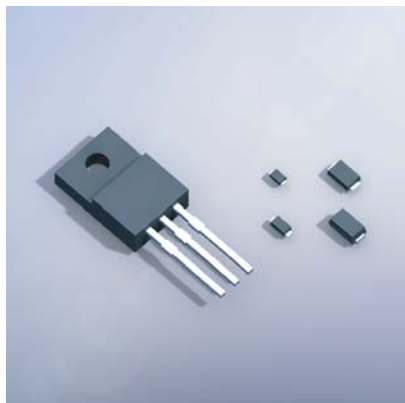
另外，双向齐纳二极管RSB系列，能够以单个封装吸收从手机及电脑等民生设备到车载等各种信号线路上的正负浪涌，实现了更高密度的封装。



Contents

次世代肖特基势垒二极管	3
世界最小0603(0201)规格肖特基势垒二极管	4
小信号肖特基势垒二极管	5
中功率肖特基势垒二极管	7
功率肖特基势垒二极管	9
双端子(Single)齐纳二极管	10
小型高可靠性1W齐纳二极管	11
低容量齐纳二极管	12
双向齐纳二极管	13
肖特基势垒二极管产品线	14
齐纳二极管产品线	17
外形尺寸图	20

次世代肖特基势垒二极管



RSX系列

概要

凭借ROHM独家开发的微细加工以及产品构造，能够将过去互为平衡关系的 V_F/I_R 同时降低。而且实现了高ESD耐量。

特点

- 低 V_F
- 低 I_R
- 耐浪涌
- 高可靠性

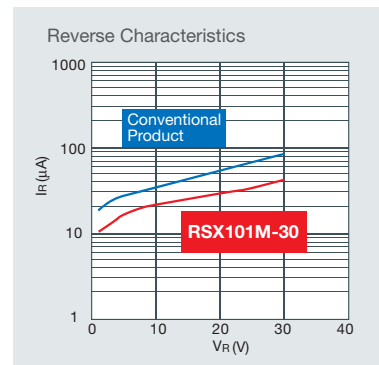
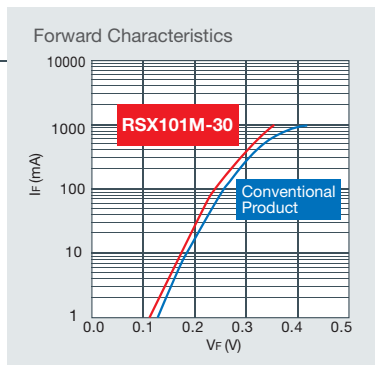
用途

- 开关用
- 整流用

低 V_F /低 I_R

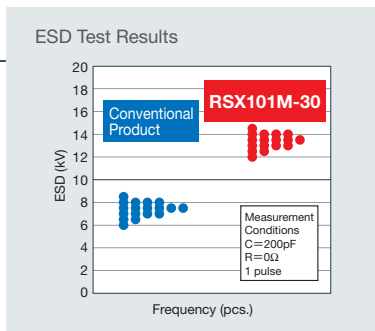
一般情况下，肖特基势垒二极管的ESD耐量要比PN接合型二极管弱。

而RSX系列凭借ROHM独家开发的微细加工以及产品构造，实现了比以往产品更强的耐量。



耐ESD强，高可靠性

一般情况下， V_F (顺向电压)与 I_R (反向电流)互为平衡关系。RSX系列凭借ROHM独家开发的微细加工以及产品构造，同时实现了低 V_F /低 I_R 。



产品线

Product No.		Absolute Maximum Ratings (Ta=25°C) *1				Electrical Characteristics (Ta=25°C) *1				Package	Equivalent Circuit Diagram
Part No.	Packing Symbol	VRM (V)	VR (V)	IO (A)	IFSM (A) 60Hz.1 \sim	VF (V)		IR (mA)			
						Max.	IF (A)	Max.	VR (V)		
RSX051VA-30	TR	30	30	0.5	5.0	0.39	0.5	0.20	30	TUMD2	
RSX071VA-30	TR	30	30	0.7	5.0	0.42	0.7	0.20	30	TUMD2	
RSX101VA-30	TR	30	30	1	5.0	0.47	1.0	0.20	30	TUMD2	
New RSX201VA-30	TR	30	30	1.5	8.0	0.46	1.5	0.30	30	TUMD2	
RSX101M-30	TR	30	30	1	45	0.39	1.0	0.20	30	PMDU	
RSX301LA-30	TR	30	30	3	70	0.42	3.0	0.20	30	PMDT	
RSX501LA-20	TR	25	20	5	70	0.39	3.0	0.50	20	PMDT	
RSX201L-30	TE25	30	30	2	60	0.44	2.0	0.15	30	PMDS	
New RSX205L-30	TE25	30	30	2	60	0.49	2.0	0.20	30	PMDS	
RSX301L-30	TE25	30	30	3	70	0.42	3.0	0.20	30	PMDS	
RSX501L-20	TE25	25	20	5	70	0.39	3.0	0.50	20	PMDS	
RSX1001T3	Bulk	30	30	10	150	0.44	5.0	0.5	30	TO-220FN	

Note: *1 Rating per element.

世界最小*0603(0201) 规格肖特基势垒二极管



GMD2封装

概要

实现了世界最小*级别0603(0201)规格 (0.6mm×0.3mm, t=0.3mm)的肖特基势垒二极管的产品化。
(封装功率与VMN2同为100mW)

特点

- 超小型
- 超薄

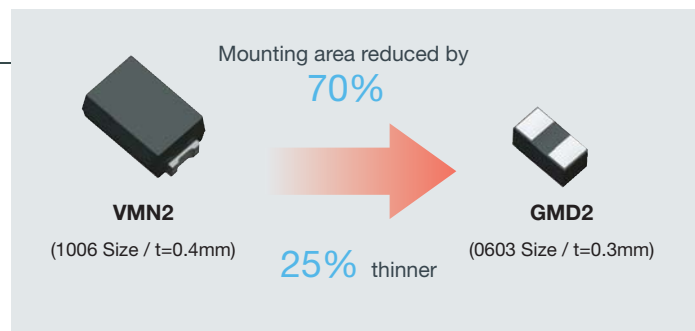
用途

- 开关用
- 整流用

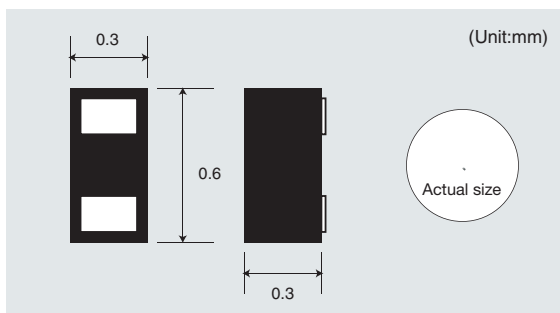
*据2009年7月ROHM调查

有助于节省空间

近年来,以手机为首的便携式电子产品向小型、薄型化加速发展。ROHM凭借独家开发的芯片构造以及超精密加工技术,实现了世界最小级别的0603(0201)规格的产品化。



外形尺寸图

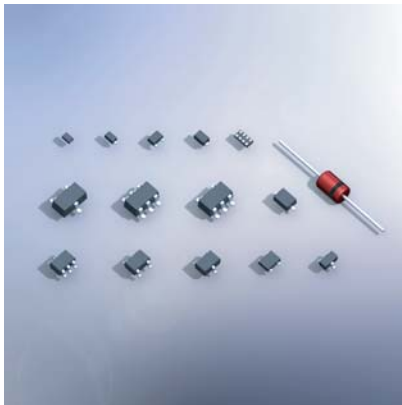


产品线

Product No.		Absolute Maximum Ratings (Ta=25°C) *1				Electrical Characteristics (Ta=25°C) *1				Package	Equivalent Circuit Diagram
Part No.	Packing Symbol	V _{RM} (V)	V _R (V)	I _O (mA)	I _{FSM} (A) 60Hz.1~	V _F (V)		I _R (μA)			
						Max.	I _F (mA)	Max.	V _R (V)		
RB521ZS-30	T2R	30	30	100	0.5	0.37	10	7	10	GMD2	
RB520ZS-30	T2R	30	30	100	0.5	0.46	10	0.3	10	GMD2	

Note: *1 Rating per element.

小信号肖特基势垒二极管



RB系列

概要

兼具低 V_F /低 I_R /高ESD& I_{FSM} 耐量的肖特基势垒二极管。

特点

- 小型
- 高性能

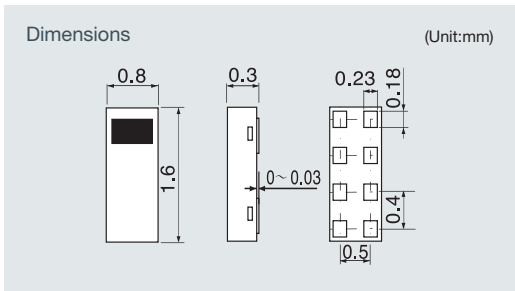
用途

- 开关用
- 整流用

超小型多封装HMD8

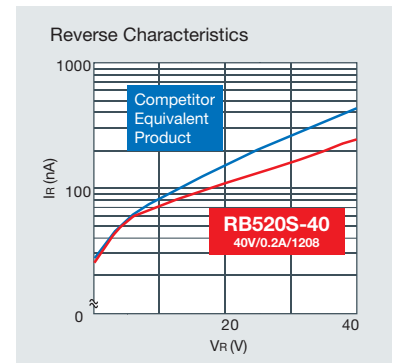
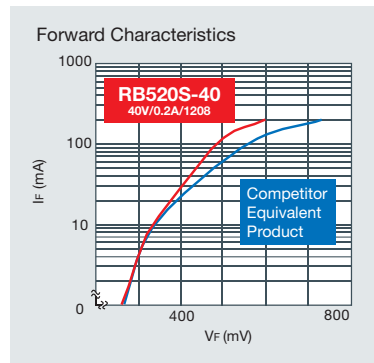
采用独家开发的芯片结构和超精密加工技术，一个封装可以装多个二极管。

而且，封装内部容易进行二极管配置和配线，因此可以构成各种各样的电路。



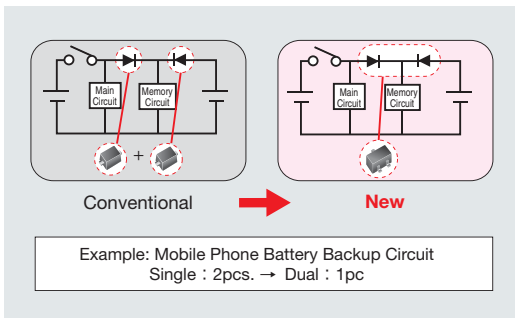
出色的低 V_F / I_R 特性

通过将ROHM独家开发的产品条件最佳化，实现了低 V_F 且低 I_R 。



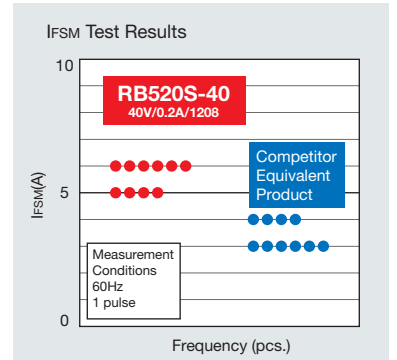
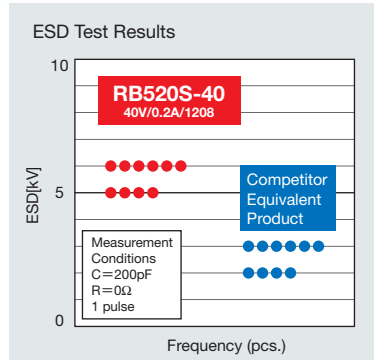
节省空间

有Single (单电路), Dual (双电路), Triple (三电路)的3种类型，使得对应高密度的产品也十分丰富。有助于节省空间。



实现高ESD/高 I_{FSM} 耐量

通过将ROHM独家开发的产品条件最佳化，实现了高ESD/高 I_{FSM} 耐量。



产品线

■ Single

Product No.		Absolute Maximum Ratings (Ta=25°C)*1				Electrical Characteristics (Ta=25°C)*1				Package	Equivalent Circuit Diagram	
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _O (mA)	I _{FSM} (A) 60Hz.1 [~]	V _F (V) Max.	I _F (mA)	I _R (μA) Max.	V _R (V)			
RB521CS-30	T2R	—	30	100	0.5	0.35	10	10	10	VMN2		
RB520CS-30	T2R	—	30	100	0.5	0.45	10	0.5	10	VMN2		
RB751CS-40	T2R	40	30	30	0.2	0.37	1	0.5	30	VMN2		
RB521G-30	T2R	—	30	100	0.5	0.35	10	10	10	VMD2		
RB520G-30	T2R	—	30	100	0.5	0.45	10	0.5	10	VMD2		
RB751G-40	T2R	40	30	30	0.2	0.37	1	0.5	30	VMD2		
RB521S-30	TE61	—	30	200	1	0.5	200	30	10	EMD2		
RB520S-30	TE61	—	30	200	1	0.6	200	1	10	EMD2		
RB531S-30	TE61	—	30	100	0.5	0.35	10	10	10	EMD2		
RB530S-30	TE61	—	30	100	0.5	0.45	10	0.5	10	EMD2		
RB751S-40	TE61	40	30	30	0.2	0.37	1	0.5	30	EMD2		
RB521S-40	TE61	45	40	200	4	0.45	0.1	90	40	EMD2		
RB520S-40	TE61	40	40	200	1	0.55	100	10	40	EMD2		
RB751V-40	TE-17	40	30	30	0.2	0.37	1	0.5	30	UMD2		
RB501V-40	TE-17	45	40	100	1	0.55	100	30	10	UMD2		
RB500V-40	TE-17	45	40	100	1	0.45	10	1	10	UMD2		
RB721Q-40	T-77	40	40	30	0.2	0.37	1	0.5	25	MSD		
RB441Q-40	T-77	40	40	100	1	0.55	100	100	40	MSD		
RB451F	T106	40	40	100	1	0.55	100	30	10	UMD3		
RB450F	T106	45	40	100	1	0.45	10	1	10	UMD3		
RB421D	T146	40	40	100	1	0.55	100	30	10	SMD3		
RB420D	T146	40	40	100	1	0.45	10	1	10	SMD3		

Note: *1 Rating per element.

■ Dual

Product No.		Absolute Maximum Ratings (Ta=25°C)*1				Electrical Characteristics (Ta=25°C)*1				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _O (mA)	I _{FSM} (A) 60Hz.1 [~]	V _F (V) Max.	I _F (mA)	I _R (μA) Max.	V _R (V)		
RB715Z	T2L	40	40	30	0.2	0.37	1	1	10	VMD3	
RB715W	TL	40	40	30	0.2	0.37	1	1	10	EMD3	
RB715F	T106	40	40	30	0.2	0.37	1	1	10	UMD3	
RB495D	T146	40	25	*2 400	2	0.5	200	70	25	SMD3	
RB705D	T146	40	40	30	0.2	0.37	1	1	10	SMD3	
RB425D	T146	40	40	100	1	0.55	100	30	10	SMD3	
RB717F	T106	40	40	30	0.2	0.37	1	1	10	UMD3	
RB557W	TL	—	30	100	0.5	0.35	10	10	10	EMD3	
RB558W	TL	—	30	100	0.5	0.35	10	10	10	EMD3	
RB548W	TL	—	30	100	0.5	0.45	10	0.5	10	EMD3	
RB706F-40	T106	45	40	30	0.2	0.37	1	1	10	UMD3	
RB706D-40	T146	45	40	30	0.2	0.37	1	1	10	SMD3	
RB481Y	T2R	—	30	100	1	0.43	100	30	10	EMD4	
RB480Y	T2R	—	30	100	1	0.53	100	1	10	EMD4	
RB481Y-40	T2R	40	40	200	1	0.45	100	90	40	EMD4	
RB480Y-40	T2R	40	40	200	1	0.55	100	10	40	EMD4	
RB481Y-90	T2R	90	90	100	1	0.61	100	100	90	EMD4	
RB480Y-90	T2R	90	90	100	1	0.69	100	5	90	EMD4	
RB481K	TL	30	30	200	1	0.5	200	30	10	UMD4	
RB480K	TL	45	40	100	1	0.6	100	1	10	UMD4	
RB471E	T148	40	40	100	1	0.55	100	30	10	SMD5	

Note: *1 Rating per element. *2 Value / 2 circuits.

■ Triple

Product No.		Absolute Maximum Ratings (Ta=25°C)*1				Electrical Characteristics (Ta=25°C)*1				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _O (mA)	I _{FSM} (A) 60Hz.1 [~]	V _F (V) Max.	I _F (mA)	I _R (μA) Max.	V _R (V)		
RB531XN	TR	—	30	100	1	0.43	100	30	10	UMD6	
RB530XN	TR	—	30	100	1	0.53	100	1	10	UMD6	
New RB541XN	TR	—	30	100	0.5	0.35	10	10	10	UMD6	
RB731XN	TR	40	40	30	0.2	0.37	1	1	10	UMD6	
RB731U	T108	40	40	30	0.2	0.37	1	1	10	SMD6	

Note: *1 Rating per element.

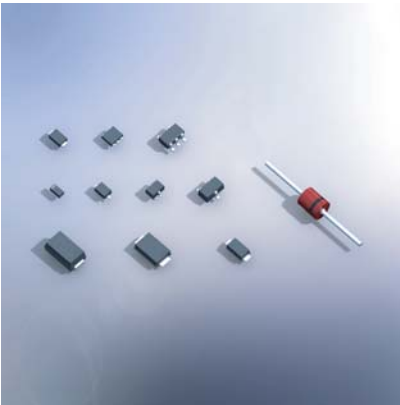
■ Multi

Product No.		絶対最大定格 (Ta=25°C)*1				Electrical Characteristics (Ta=25°C)*1				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _O (mA)	I _{FSM} (A) 60Hz.1 [~]	V _F (V) Max.	I _F (mA)	I _R (μA) Max.	V _R (V)		
New RB521ZS8A30	TE61	30	30	100	0.5	0.37	10	9	10	HMD8	

Note: *1 Rating per element.

中功率肖特基势垒二极管

RB系列



概要

产品线为小型&薄型封装。以1608规格实现 $I_o=1A$ 等级。

特长

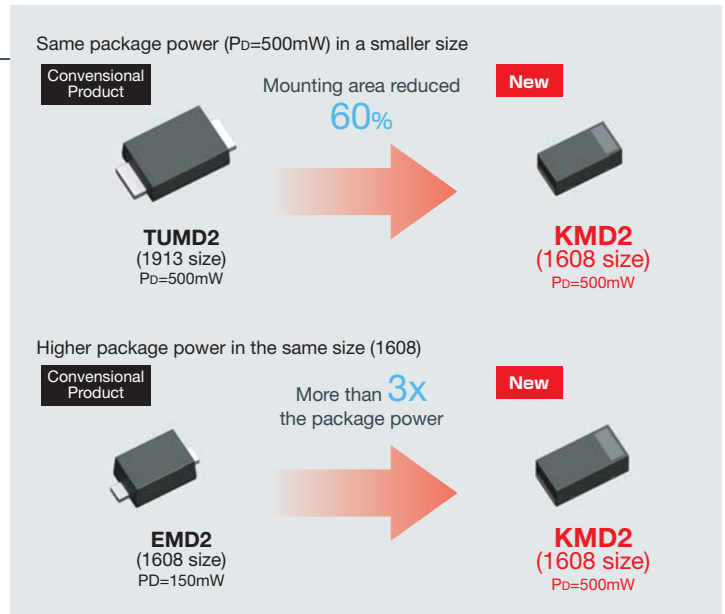
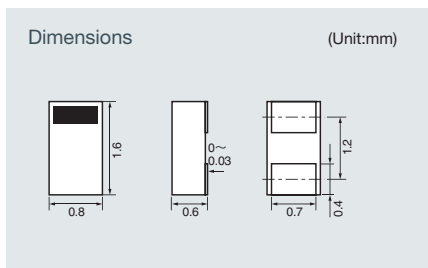
- 小型
- 耐浪涌

用途

- 开关用
- 整流用

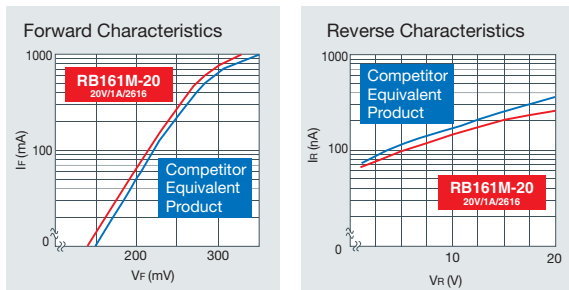
以1608尺寸实现 $I_o=1A$

ROHM采用独家开发的芯片结构和"GMD2"的超精密加工技术，以1608尺寸实现了 $I_o=1A$ 。



实现低 V_F ，低 I_R

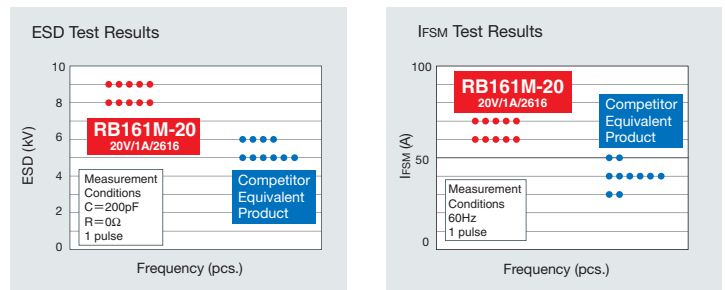
通过将ROHM独家开发的产品条件最佳化，实现低 V_F 且低 I_R 。



实现高ESD/高 I_{FSM} 耐量

通过将ROHM独家开发的产品条件最佳化，实现高ESD耐量。

而且，通过采用无线构造，相比以往构造实现了高 I_{FSM} 耐量，同时也能放心地面对通电时的大浪涌电流负荷。



产品线

Single

Product No.		Absolute Maximum Ratings (Ta=25°C)*				Electrical Characteristics (Ta=25°C)*				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _O (A)	I _{FSM} (A) 60Hz, 1ms	V _F (V) Max.	I _F (A)	I _R (mA) Max.	V _R (V)		
New RB551SS-30	T2R	30	20	0.5	5	0.47	0.5	0.1	20	KMD2	
New RB550SS-30	T2R	30	30	0.5	5	0.59	0.5	0.008	15	KMD2	
New RB161SS-20	T2R	30	20	1	5	0.42	1	1	20	KMD2	
New RB160SS-40	T2R	40	40	1	5	0.55	0.7	0.05	20	KMD2	
RB551V-30	TE-17	30	20	0.5	2	0.36	0.1	0.1	20	UMD2	
RB161VA-20	TR	30	20	1	5	0.42	1	1	20	TUMD2	
RB162VA-20	TR	25	20	1	5	0.40	1	1.2	20	TUMD2	
RB550VA-30	TR	30	30	1	3	0.52	1	0.03	10	TUMD2	
RB160VA-40	TR	40	40	1	5	0.55	0.7	0.05	40	TUMD2	
RB411VA-50	TR	50	20	0.5	3	0.5	0.5	0.03	10	TUMD2	
RB400VA-50	TR	50	40	0.5	3	0.55	0.5	0.05	30	TUMD2	
RB021VA-90	TR	90	90	0.2	5	0.49	0.2	0.9	90	TUMD2	
RB161M-20	TR	25	20	1	30	0.35	1	0.7	20	PMDU	
RB051M-2Y	TR	20	20	3	30	0.46	3	0.9	20	PMDU	
RB160M-30	TR	30	30	1	30	0.48	1	0.05	30	PMDU	
RB070M-30	TR	30	30	1.5	30	0.49	1.5	0.05	30	PMDU	
RB060M-30	TR	30	30	2	55	0.49	2	0.05	30	PMDU	
New RB050M-30	TR	30	30	3	55	0.51	3	0.05	30	PMDU	
RB160M-40	TR	40	40	1	30	0.51	1	0.03	40	PMDU	
RB162M-40	TR	40	40	1	30	0.55	1	0.1	40	PMDU	
RB160M-60	TR	60	60	1	30	0.55	1	0.05	60	PMDU	
RB162M-60	TR	60	60	1	20	0.65	1	0.1	60	PMDU	
New RB060M-60	TR	60	60	2	30	0.61	2	0.05	60	PMDU	
RB160M-90	TR	90	90	1	30	0.73	1	0.1	90	PMDU	
RB050LA-30	TR	—	30	3	70	0.45	3	0.15	30	PMDT	
RB050LA-40	TR	40	40	3	70	0.55	3	0.1	40	PMDT	
RB051LA-40	TR	40	20	3	70	0.45	3	1	20	PMDT	
RB055LA-40	TR	40	40	3	70	0.62	3	0.1	40	PMDT	
RB081L-20	TE25	25	20	5	70	0.45	5	0.7	20	PMDS	
New RB055L-30	TE25	30	30	3	55	0.55	3	0.05	30	PMDS	
New RB080L-30	TE25	30	30	5	70	0.51	5	0.15	30	PMDS	
RB161L-40	TE25	40	20	1	70	0.4	1	1	20	PMDS	
RB051L-40	TE25	40	20	3	70	0.45	3	1	20	PMDS	
RB160L-40	TE25	40	40	1	70	0.55	1	0.1	40	PMDS	
RB162L-40	TE25	40	40	1	20	0.55	1	0.5	40	PMDS	
RB060L-40	TE25	40	40	2	70	0.5	2	1	40	PMDS	
RB050L-40	TE25	40	40	3	70	0.55	3	1	40	PMDS	
RB055L-40	TE25	40	40	3	40	0.65	3	0.5	40	PMDS	
RB056L-40	TE25	40	40	3	70	0.67	3	0.05	40	PMDS	
RB160L-60	TE25	60	60	1	30	0.58	1	1	60	PMDS	
RB162L-60	TE25	60	60	1	20	0.65	1	0.1	60	PMDS	
RB050L-60	TE25	60	60	2	70	0.52	2	0.1	60	PMDS	
RB160L-90	TE25	95	90	1	30	0.73	1	0.1	90	PMDS	
RB160A30	T-32	30	30	1	70	0.48	1	0.05	30	MSR	
RB160A40	T-32	40	40	1	50	0.55	1	0.03	40	MSR	
RB160A60	T-32	60	60	1	60	0.55	1	0.05	60	MSR	
RB160A90	T-32	90	90	1	50	0.73	1	0.1	90	MSR	
RB201A60	T-32	60	60	2	40	0.58	2	0.1	60	MSR	
RB461F	T106	25	20	0.7	3	0.49	0.7	0.2	20	UMD3	
RB491D	T146	25	20	1	3	0.45	1	0.2	20	SMD3	
RB411D	T146	40	20	0.5	3	0.5	0.5	0.03	10	SMD3	
RB400D	T146	40	40	0.5	3	0.55	0.5	0.05	30	SMD3	

Note: *1 Rating per element.

Dual

Product No.		Absolute Maximum Ratings (Ta=25°C)*				Electrical Characteristics (Ta=25°C)*				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _O (A)	I _{FSM} (A) 60Hz, 1ms	V _F (V) Max.	I _F (A)	I _R (mA) Max.	V _R (V)		
RB496KA	TR	—	20	1	5	0.43	1	0.8	10	TUMD5	
RB496EA	TR	20	20	1	10	0.4	1	0.5	10	TSMD5	
RB550EA	TR	30	30	0.7	15	0.49	0.7	0.05	30	TSMD5	

Note: *1 Rating per element.

功率肖特基势垒二极管



RB系列

概要

在已有的高功率产品线中新加入了100V耐压功率二极管。

特长

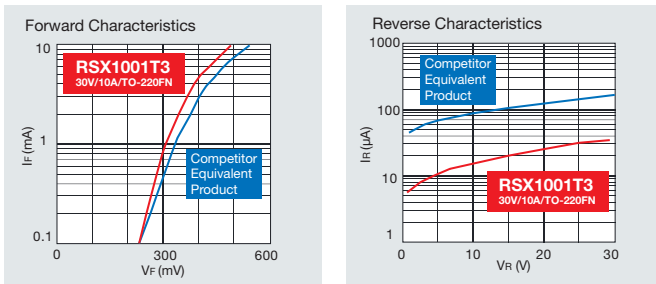
- 低 V_f
- 低 I_R
- 耐浪涌

用途

- 开关用
- 整流用

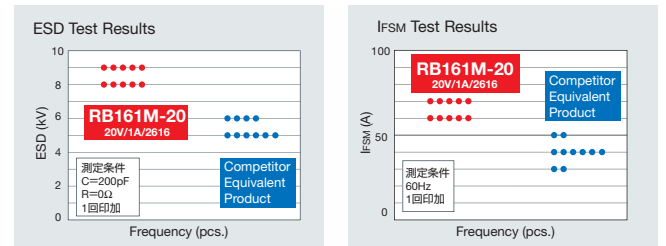
出色的低 V_f / I_R 特性

对于要求高转换效率的电源用途，凭借低 V_f 实现了散热对策=高转换效率。高温工作时也能凭借低 I_R 实现低损耗。



实现高ESD/高 I_{FSM} 耐量

凭借ROHM独家开发的微细加工以及产品构造，相比以往构造实现了高ESD且高 I_{FSM} 耐量。



产品线

Product No.		Absolute Maximum Ratings (Ta=25°C)*1				Electrical Characteristics (Ta=25°C)*1				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _O *2 (A)	I _{FSM} (A) 60Hz, 1ms	V _F (V) Max.	I _F (A)	I _R (mA) Max.	V _R (V)		
RB095B-30	TL	35	30	6	45	0.425	3	0.2	30	D-Pack (CPD)	
RB095B-40	TL	45	40	6	45	0.55	3	0.1	40		
RB095B-60	TL	60	60	6	45	0.58	3	0.1	60		
RB095B-90	TL	90	90	6	45	0.75	3	0.15	90		
RB085B-30	TL	35	30	10	35	0.48	4	0.3	30		
RB085B-40	TL	45	40	10	45	0.55	5	0.2	40		
RB085B-90	TL	90	90	10	45	0.83	5	0.15	90		
RB075B40S	TL	40	40	5	45	0.75	5	0.005	40	D-Pack (CPD)	
RB225N-40	TL	40	40	30	50	0.55	15	0.5	40	LPDS	
RB095T-40	バルク	45	40	6	100	0.55	3	0.1	40	TO-220FN	
RB085T-40	バルク	45	40	10	100	0.55	5	0.2	40		
RB205T-40	バルク	45	40	15	100	0.55	7.5	0.3	40		
RB215T-40	バルク	45	40	20	100	0.55	10	0.5	40		
RB225T-40	バルク	40	40	30	100	0.63	15	0.5	40		
RB095T-60	バルク	60	60	6	100	0.58	3	0.1	60		
RB085T-60	バルク	60	60	10	100	0.58	5	0.3	60		
RB205T-60	バルク	60	60	15	100	0.58	7.5	0.6	60		
RB215T-60	バルク	60	60	20	100	0.58	10	0.6	60		
RB225T-60	バルク	60	60	30	100	0.63	15	0.6	60		
RB095T-90	バルク	90	90	6	100	0.75	3	0.15	90		
RB085T-90	バルク	90	90	10	100	0.83	5	0.15	90		
RB205T-90	バルク	90	90	15	100	0.78	7.5	0.3	90		
RB215T-90	バルク	90	90	20	100	0.75	10	0.4	90		
RB225T100	バルク	100	100	30	100	0.88	15	0.4	100		

Note: *1 Value / element. *2 1/2 I_O per diode.

双端子 (Single) 齐纳二极管



世界最小*级别0603(0201)规格 GDZ系列

概要

实现了世界最小*级别0603(0201)规格(0.6mm × 0.3mm, t=0.3mm)的齐纳二极管的产品化。
(封装功率与VMN2同为100mW)

特长

- 超小型
- 超薄

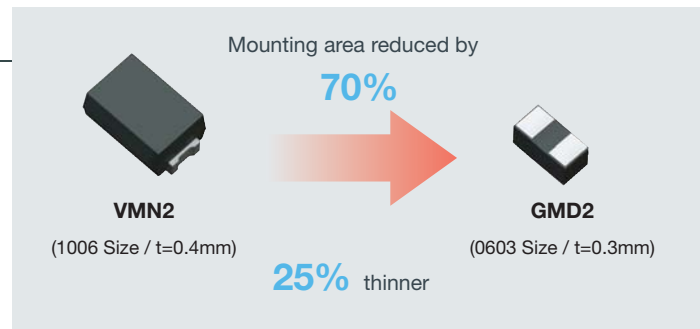
用途

- 所有要求小型、薄型、高密度化的整机。

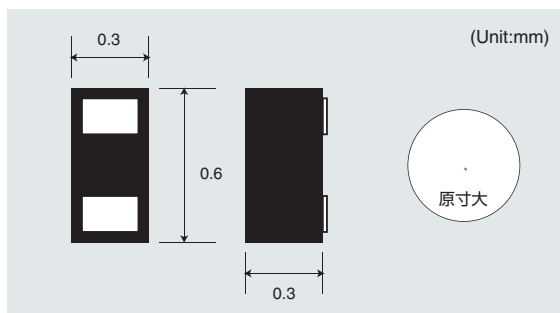
*据2009年7月ROHM调查

有助于节省空间

近年来，以手机为首的便携式电子产品向小型、薄型化加速发展。ROHM凭借独家开发的芯片构造以及超精密加工技术，实现了世界最小级别的0603(0201)规格的产品化。



外形尺寸图



绝对最大额定值

Permissible Loss	P	.....	100mW
Junction Temperature	T _j	.....	150°C
Storage Temperature	T _{stg}	.....	-55 to 150°C
Operating Temperature	T _{opr}	.....	-55 to 150°C

电气特性

T_a=25°C

Part No.	Zener Voltage V _z (V)		Measurement Conditions I _z (mA)
	Min.	Max.	
GDZ3.9	3.740	4.160	5.0
GDZ4.7	4.420	4.900	5.0
GDZ5.1	4.840	5.370	5.0
GDZ5.6	5.310	5.920	5.0
GDZ6.2	5.860	6.530	5.0
GDZ6.8	6.470	7.140	5.0
GDZ7.5	7.060	7.840	5.0
GDZ8.2	7.760	8.640	5.0

小型高可靠性 1W 齐纳二极管



KDZ系列

概要

虽为2616规格，但实现了1W的高功率

特长

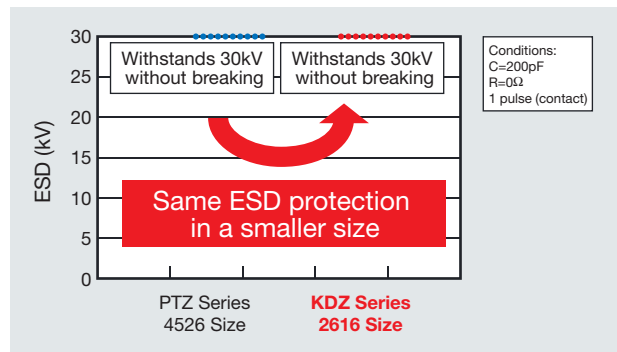
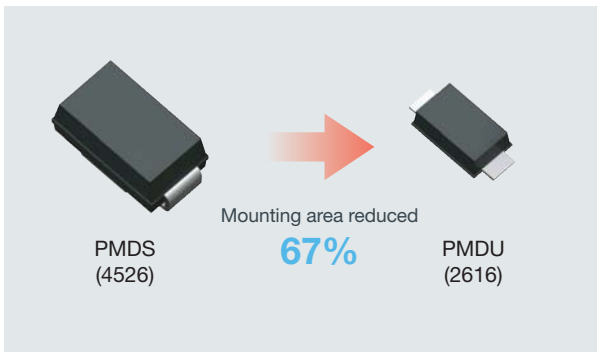
- 小型
- 高功率

用途

- 车载
- 工业设备
- 电源

封装虽变小但ESD耐量不变

新近列出虽为2616规格，但功率与以往的4526规格同为1W的齐纳二极管产品。



2616规格保证1W

	PTZ Series	KDZ Series
Package	PMDS 4.5mm × 2.6mm (t=1.1mm)	PMDU 2.6mm × 1.6mm (t=0.8mm)
P	1W	1W
Vz rank	3.6 to 39V	3.6 to 39V

绝对最大额定值

Permissible Loss	P	.....	1W
Junction Temperature	Tj	.....	150°C
Storage Temperature	Tstg	.....	-55 to 150°C
Operating Temperature	Topr	.....	-55 to 150°C

电气特性

Ta=25°C

Part No.	Zener Voltage Vz(V)		Measurement Conditions Iz(mA)
	Min.	Max.	
KDZ3.6B	3.60	4.00	40
KDZ3.9B	3.90	4.40	40
KDZ4.3B	4.30	4.80	40
KDZ4.7B	4.70	5.20	40
KDZ5.1B	5.10	5.70	40
KDZ5.6B	5.60	6.30	40
KDZ6.2B	6.20	7.00	40
KDZ6.8B	6.80	7.70	40
KDZ7.5B	7.50	8.40	40
KDZ8.2B	8.20	9.30	40
KDZ9.1B	9.10	10.20	40
KDZ10B	10.00	11.20	40
KDZ11B	11.00	12.30	20
KDZ12B	12.00	13.50	20
KDZ13B	13.30	15.00	20
KDZ15B	14.70	16.50	20
KDZ16B	16.20	18.30	20
KDZ18B	18.00	20.30	20
KDZ20B	20.00	22.40	20
KDZ22B	22.00	24.50	10
KDZ24B	24.00	27.60	10
KDZ27B	27.00	30.80	10
KDZ30B	30.00	34.00	10
KDZ33B	33.00	37.00	10
KDZ36B	36.00	40.00	10

低容量齐纳二极管



最适合用于高速通信线的 ESD浪涌保护

概要

最适合用于高速通信USB2.0等的接口。

特长

- 小型
- 超薄
- 低端子间容量

用途

- 手机
- 笔记本电脑
- DSC, DVC
- LCD, PDP

低容量齐纳的特点

Normal Zener
Inter-pin capacitance is large (30 to 50pF) the signal becomes rounded

High speed signal → Signal waveform rounded, deteriorating communication. (信号传达障碍!)

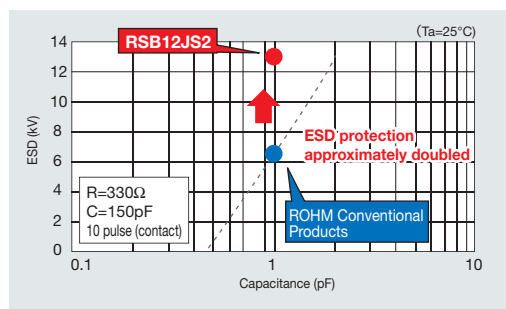
Low Capacitance Zener
Inter-pin capacitance is small (1 to 8pF)

High speed signal → Signal waveform resists rounding. (信号传达良好!)

静电容量

通常 Ct 下降 ESD 耐量也会变低

但是 ROHM 同时实现了低 Ct(1pF) 和高 ESD (13kV) !



RSB12JS2 (Ta=25°C)	
Permissible Loss	150mW / Total
Storage Temperature	-55 to 150°C
Zener Voltage	9.6V to 14.4V
Reverse Current	0.1μA Max.
Capacitance Between Pins	1pF typ.

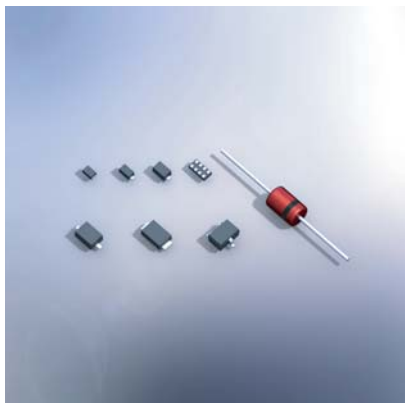
产品线

Part No.	Absolute Maximum Ratings (Ta=25°C)		Electrical Characteristics (Ta=25°C)				Package	Equivalent Circuit Diagram
	P (mW)	Vz (V)	Iz (mA)	Ct (pF)	f (MHz)	Vr (V)		
UMZU6.2N	200	5.9 to 6.5	5	8	1	0	UMD3	
FTZU6.2E	200	5.9 to 6.5	5	8	1	0	SMD5	
CDZC6.8B	100	6.65 to 6.93	5	3	1	0	VMN2	
EDZC6.8B	150	6.65 to 6.93	5	3	1	0	EMD2	
EMZC6.8N	150	6.47 to 7.14	5	3	1	0	EMD3	
VMZT6.8N	150	6.47 to 7.14	5	7	1	0	UMD3	
UMZC6.8N	200	6.47 to 7.14	5	3	1	0	UMD3	
STZC6.8N	200	6.47 to 7.14	5	3	1	0	SMD3	
RSB12Z	100	9.6 to 14.4	5	1	1	0	VMD3	
RSB12W	150	9.6 to 14.4	5	1	1	0	EMD3	
EMZT6.8E	150	6.47 to 7.14	5	7	1	0	EMD5	
New RSB6.8JS2	150	6.00 to 8.00	5	1	1	0	EMD6	
RSB12JS2	150	9.6 to 14.4	5	1	1	0	EMD6	
New RSAC6.8CS	100	6.70 to 7.33	5	0.3	1	0	VMN2	
New RSAC16CS	100	16.49 to 17.51	5	0.3	1	0	VMN2	
New RSBC6.8CS	100	6.62 to 7.24	5	1	1	0	VMN2	

* : The (3) and (6) pin should be OPEN.

双向齐纳二极管

将正负浪涌吸收单封装化



概要

依靠单芯片吸收正负浪涌。
有助于削减部件数目。

特长

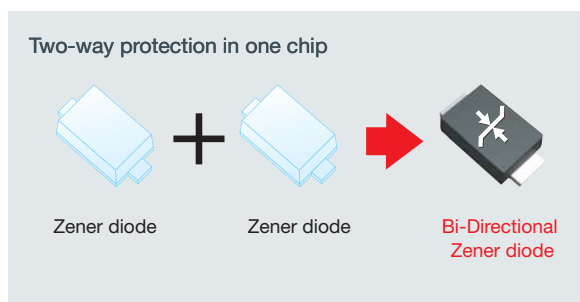
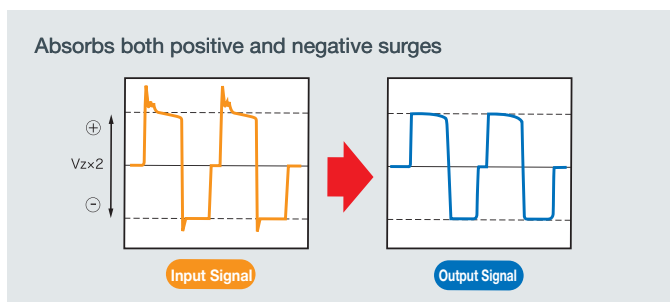
- 小型
- 省空间

用途

- 便携式音响
- DSC/DVC
- 手机
- 车载

对应正负浪涌

凭借ROHM独创结构，能够以单芯片应对正负浪涌。有助于整机的小型化、减少部件数目。

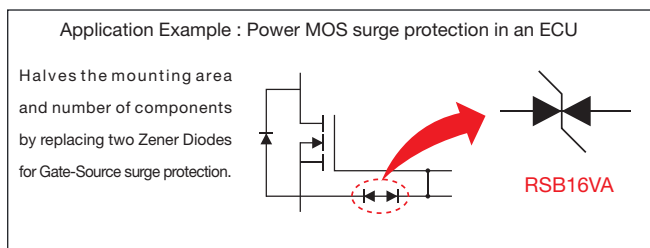


高可靠性双向齐纳二极管

凭借TUMD2封装提高散热性，封装功率达到500mW。

最适用于CAN-BUS / LIN-BUS。

应用电路例



产品线

Part No.	Absolute Maximum Ratings (Ta=25°C)		Electrical Characteristics (Ta=25°C)		Remarks	Package	Equivalent Circuit Diagram
	P (mW)	Vz (V)	Iz (mA)				
RSB6.8CS	100	5.78 to 7.82	1			VMN2	
RSB6.8G	100	5.78 to 7.82	1			VMD2	
RSB5.6S	150	4.76 to 6.44	1			EMD2	
RSB6.8S	150	5.78 to 7.82	1			EMD2	
RSB16V	200	14.4 to 17.6	1		IEC61000-4-2	UMD2	
RSB18V	200	16.2 to 19.8	1		150pF, 330Ω	UMD2	
RSB27V	200	26.2 to 32.0	1		Contact 8kV In air 15kV	UMD2	
RSB16VA	500	14.4 to 17.6	1			TUMD2	
RSB6.8F2	200	5.78 to 7.82	1			UMD3	
RSB16F2	200	14.4 to 17.6	1			UMD3	
RSB18F2	200	16.2 to 19.8	1			UMD3	
RSB27F2	200	26.2 to 32.0	1			UMD3	

肖特基势垒二极管 产品线

■ 高效率, 高可靠性表面安装型 RSX系列 ($I_o \geq 0.5A$)

Product No.		Absolute Maximum Ratings (Ta=25°C) *				Electrical Characteristics (Ta=25°C) *				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _o (A)	I _{FSM} (A) 60Hz, 1 \sim	V _F (V) Max.	I _F (A)	I _R (mA) Max.	V _R (V)		
RSX051VA-30	TR	30	30	0.5	5.0	0.39	0.5	0.20	30	TUMD2	
RSX071VA-30	TR	30	30	0.7	5.0	0.42	0.7	0.20	30	TUMD2	
RSX101VA-30	TR	30	30	1	5.0	0.47	1.0	0.20	30	TUMD2	
New RSX201VA-30	TR	30	30	1.5	8.0	0.46	1.5	0.30	30	TUMD2	
RSX101M-30	TR	30	30	1	45	0.39	1.0	0.20	30	PMDU	
RSX301LA-30	TR	30	30	3	70	0.42	3.0	0.20	30	PMDT	
RSX501LA-20	TR	25	20	5	70	0.39	3.0	0.50	20	PMDT	
RSX201L-30	TE25	30	30	2	60	0.44	2.0	0.15	30	PMDS	
New RSX205L-30	TE25	30	30	2	60	0.49	2.0	0.20	30	PMDS	
RSX301L-30	TE25	30	30	3	70	0.42	3.0	0.20	30	PMDS	
RSX501L-20	TE25	25	20	5	70	0.39	3.0	0.50	20	PMDS	
RSX1001T3	Bulk	30	30	10	150	0.44	5.0	0.5	30	TO-220FN	

Note: * Value / Element.

■ 小信号肖特基势垒二极管 ($I_o < 0.5A$)

Product No.		Absolute Maximum Ratings (Ta=25°C) *1				Electrical Characteristics (Ta=25°C) *1				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _o (mA)	I _{FSM} (A) 60Hz, 1 \sim	V _F (V) Max.	I _F (mA)	I _R (μ A) Max.	V _R (V)		
RB521ZS-30	T2R	30	30	100	0.5	0.37	10	7	10	GMD2	
RB520ZS-30	T2R	30	30	100	0.5	0.46	10	0.3	10	GMD2	
RB521CS-30	T2R	—	30	100	0.5	0.35	10	10	10	VMN2	
RB520CS-30	T2R	—	30	100	0.5	0.45	10	0.5	10	VMN2	
RB751CS-40	T2R	40	30	30	0.2	0.37	1	0.5	30	VMN2	
RB521G-30	T2R	—	30	100	0.5	0.35	10	10	10	VMD2	
RB520G-30	T2R	—	30	100	0.5	0.45	10	0.5	10	VMD2	
RB751G-40	T2R	40	30	30	0.2	0.37	1	0.5	30	VMD2	
RB521S-30	TE61	—	30	200	1	0.5	200	30	10	EMD2	
RB520S-30	TE61	—	30	200	1	0.6	200	1	10	EMD2	
RB531S-30	TE61	—	30	100	0.5	0.35	10	10	10	EMD2	
RB530S-30	TE61	—	30	100	0.5	0.45	10	0.5	10	EMD2	
RB751S-40	TE61	40	30	30	0.2	0.37	1	0.5	30	EMD2	
RB521S-40	TE61	45	40	200	4	0.45	0.1	90	40	EMD2	
RB520S-40	TE61	40	40	200	1	0.55	100	10	40	EMD2	
RB751V-40	TE-17	40	30	30	0.2	0.37	1	0.5	30	UMD2	
RB501V-40	TE-17	45	40	100	1	0.55	100	30	10	UMD2	
RB500V-40	TE-17	45	40	100	1	0.45	10	1	10	UMD2	
RB721Q-40	T-77	40	40	30	0.2	0.37	1	0.5	25	MSD	
RB441Q-40	T-77	40	40	100	1	0.55	100	100	40	MSD	
New RB521ZS8A30	TE61	30	30	100	0.5	0.37	10	7	10	HMD8	
RB715Z	T2L	40	40	30	0.2	0.37	1	1	10	VMD3	
RB715W	TL	40	40	30	0.2	0.37	1	1	10	EMD3	
RB715F	T106	40	40	*2 30	0.2	0.37	1	1	10	UMD3	
RB495D	T146	40	25	400	2	0.5	200	70	25	SMD3	
RB705D	T146	40	40	30	0.2	0.37	1	1	10	SMD3	
RB425D	T146	40	40	100	1	0.55	100	30	10	SMD3	
RB717F	T106	40	40	30	0.2	0.37	1	1	10	UMD3	
RB557W	TL	—	30	100	0.5	0.35	10	10	10	EMD3	
RB558W	TL	—	30	100	0.5	0.35	10	10	10	EMD3	
RB548W	TL	—	30	100	0.5	0.45	10	0.5	10	EMD3	
RB706F-40	T106	45	40	30	0.2	0.37	1	1	10	UMD3	
RB706D-40	T146	45	40	30	0.2	0.37	1	1	10	SMD3	
RB451F	T106	40	40	100	1	0.55	100	30	10	UMD3	
RB450F	T106	45	40	100	1	0.45	10	1	10	UMD3	
RB421D	T146	40	40	100	1	0.55	100	30	10	SMD3	
RB420D	T146	40	40	100	1	0.45	10	1	10	SMD3	
RB481Y	T2R	—	30	100	1	0.43	100	30	10	EMD4	
RB480Y	T2R	—	30	100	1	0.53	100	1	10	EMD4	
RB480Y-40	T2R	40	40	200	1	0.55	100	10	40	EMD4	
RB481Y-40	T2R	40	40	200	1	0.45	100	90	40	EMD4	
RB481Y-90	T2R	90	90	100	1	0.61	100	100	90	EMD4	
RB480Y-90	T2R	90	90	100	1	0.69	100	5	90	EMD4	
RB481K	TL	30	30	200	1	0.5	200	30	10	UMD4	
RB480K	TL	45	40	100	1	0.6	100	1	10	UMD4	
RB471E	T148	40	40	100	1	0.55	100	30	10	SMD5	
RB531XN	TR	—	30	100	1	0.43	100	30	10	UMD6	
RB530XN	TR	—	30	100	1	0.53	100	1	10	UMD6	
New RB541XN	TR	—	30	100	0.5	0.35	10	10	10	UMD6	
RB731XN	TR	40	40	30	0.2	0.37	1	1	10	UMD6	
RB731U	T108	40	40	30	0.2	0.37	1	1	10	SMD6	

Note: *1 Value / Element *2 1/2 I_o per diode.

■ 中功率肖特基势垒二极管

Product No.		Absolute Maximum Ratings (Ta=25°C)*				Electrical Characteristics (Ta=25°C)*				Package	Equivalent Circuit Diagram	
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _O (A)	I _{FSM} (A) 60Hz, 1ms	V _F (V) Max.	I _F (A)	I _R (mA) Max.	V _R (V)			
New	RB551SS-30	T2R	30	20	0.5	5	0.47	0.5	0.1	20	KMD2	
New	RB550SS-30	T2R	30	30	0.5	5	0.59	0.5	0.008	15	KMD2	
New	RB161SS-20	T2R	30	20	1	5	0.42	1	1	20	KMD2	
New	RB160SS-40	T2R	40	40	1	5	0.55	0.7	0.05	20	KMD2	
	RB551V-30	TE-17	30	20	0.5	2	0.36	0.1	0.1	20	UMD2	
	RB161VA-20	TR	30	20	1	5	0.42	1	1	20	TUMD2	
	RB162VA-20	TR	25	20	1	5	0.40	1	1.2	20	TUMD2	
	RB550VA-30	TR	30	30	1	3	0.52	1	0.03	10	TUMD2	
	RB160VA-40	TR	40	40	1	5	0.55	0.7	0.05	40	TUMD2	
	RB411VA-50	TR	50	20	0.5	3	0.5	0.5	0.03	10	TUMD2	
	RB400VA-50	TR	50	40	0.5	3	0.55	0.5	0.05	30	TUMD2	
	RB021VA-90	TR	90	90	0.2	5	0.49	0.2	0.9	90	TUMD2	
	RB161M-20	TR	25	20	1	30	0.35	1	0.7	20	PMDU	
	RB051M-2Y	TR	20	20	3	30	0.46	3	0.9	20	PMDU	
	RB160M-30	TR	30	30	1	30	0.48	1	0.05	30	PMDU	
	RB070M-30	TR	30	30	1.5	30	0.49	1.5	0.05	30	PMDU	
	RB060M-30	TR	30	30	2	55	0.49	2	0.05	30	PMDU	
New	RB050M-30	TR	30	30	3	55	0.51	3	0.05	30	PMDU	
	RB160M-40	TR	40	40	1	30	0.51	1	0.03	40	PMDU	
	RB162M-40	TR	40	40	1	30	0.55	1	0.1	40	PMDU	
	RB160M-60	TR	60	60	1	30	0.55	1	0.05	60	PMDU	
	RB162M-60	TR	60	60	1	20	0.65	1	0.1	60	PMDU	
New	RB060M-60	TR	60	60	2	30	0.61	2	0.05	60	PMDU	
	RB160M-90	TR	90	90	1	30	0.73	1	0.1	90	PMDU	
	RB050LA-30	TR	—	30	3	70	0.45	3	0.15	30	PMDT	
	RB050LA-40	TR	40	40	3	70	0.55	3	0.1	40	PMDT	
	RB051LA-40	TR	40	20	3	70	0.45	3	1	20	PMDT	
	RB055LA-40	TR	40	40	3	70	0.62	3	0.1	40	PMDT	
	RB081L-20	TE25	25	20	5	70	0.45	5	0.7	20	PMDS	
New	RB055L-30	TE25	30	30	3	55	0.55	3	0.05	30	PMDS	
New	RB080L-30	TE25	30	30	5	70	0.51	5	0.15	30	PMDS	
	RB161L-40	TE25	40	20	1	70	0.4	1	1	20	PMDS	
	RB051L-40	TE25	40	20	3	70	0.45	3	1	20	PMDS	
	RB160L-40	TE25	40	40	1	70	0.55	1	0.1	40	PMDS	
	RB162L-40	TE25	40	40	1	20	0.55	1	0.5	40	PMDS	
	RB060L-40	TE25	40	40	2	70	0.5	2	1	40	PMDS	
	RB050L-40	TE25	40	40	3	70	0.55	3	1	40	PMDS	
	RB055L-40	TE25	40	40	3	40	0.65	3	0.5	40	PMDS	
	RB056L-40	TE25	40	40	3	70	0.67	3	0.05	40	PMDS	
	RB160L-60	TE25	60	60	1	30	0.58	1	1	60	PMDS	
	RB162L-60	TE25	60	60	1	20	0.65	1	0.1	60	PMDS	
	RB050L-60	TE25	60	60	2	70	0.52	2	0.1	60	PMDS	
	RB160L-90	TE25	95	90	1	30	0.73	1	0.1	90	PMDS	
	RB160A30	T-32	30	30	1	70	0.48	1	0.05	30	MSR	
	RB160A40	T-32	40	40	1	50	0.55	1	0.03	40	MSR	
	RB160A60	T-32	60	60	1	60	0.55	1	0.05	60	MSR	
	RB160A90	T-32	90	90	1	50	0.73	1	0.1	90	MSR	
	RB201A60	T-32	60	60	2	40	0.58	2	0.1	60	MSR	
	RB461F	T106	25	20	0.7	3	0.49	0.7	0.2	20	UMD3	
	RB491D	T146	25	20	1	3	0.45	1	0.2	20	SMD3	
	RB411D	T146	40	20	0.5	3	0.5	0.5	0.03	10	SMD3	
	RB400D	T146	40	40	0.5	3	0.55	0.5	0.05	30	SMD3	
	RB496KA	TR	—	20	1	5	0.43	1	0.8	10	TUMD5	
	RB496EA	TR	20	20	1	10	0.4	1	0.5	10	TSMD5	
	RB550EA	TR	30	30	0.7	15	0.49	0.7	0.05	30	TSMD5	

Note: *1 Value / element.

■ 功率肖特基势垒二极管

Product No.		Absolute Maximum Ratings (Ta=25°C) *1				Electrical Characteristics (Ta=25°C) *1				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _O *2 (A)	I _{FSM} (A) 60Hz, 1 \approx	V _F (V) Max.	I _F (A)	I _R (mA) Max.	V _R (V)		
RB095B-30	TL	35	30	6	45	0.425	3	0.2	30	D-Pack (CPD)	
RB095B-40	TL	45	40	6	45	0.55	3	0.1	40	D-Pack (CPD)	
RB095B-60	TL	60	60	6	45	0.58	3	0.1	60	D-Pack (CPD)	
RB095B-90	TL	90	90	6	45	0.75	3	0.15	90	D-Pack (CPD)	
RB085B-30	TL	35	30	10	35	0.48	4	0.3	30	D-Pack (CPD)	
RB085B-40	TL	45	40	10	45	0.55	5	0.2	40	D-Pack (CPD)	
RB085B-90	TL	90	90	10	45	0.83	5	0.15	90	D-Pack (CPD)	
RB075B40S	TL	40	40	5	45	0.75	5	0.005	40	D-Pack (CPD)	
RB225N-40	TL	40	40	30	50	0.55	15	0.5	40	LPDS	
RB095T-40	Bulk	45	40	6	100	0.55	3	0.1	40	TO-220FN	
RB085T-40	Bulk	45	40	10	100	0.55	5	0.2	40	TO-220FN	
RB205T-40	Bulk	45	40	15	100	0.55	7.5	0.3	40	TO-220FN	
RB215T-40	Bulk	45	40	20	100	0.55	10	0.5	40	TO-220FN	
RB225T-40	Bulk	40	40	30	100	0.63	15	0.5	40	TO-220FN	
RB095T-60	Bulk	60	60	6	100	0.58	3	0.1	60	TO-220FN	
RB085T-60	Bulk	60	60	10	100	0.58	5	0.3	60	TO-220FN	
RB205T-60	Bulk	60	60	15	100	0.58	7.5	0.6	60	TO-220FN	
RB215T-60	Bulk	60	60	20	100	0.58	10	0.6	60	TO-220FN	
RB225T-60	Bulk	60	60	30	100	0.63	15	0.6	60	TO-220FN	
RB095T-90	Bulk	90	90	6	100	0.75	3	0.15	90	TO-220FN	
RB085T-90	Bulk	90	90	10	100	0.83	5	0.15	90	TO-220FN	
RB205T-90	Bulk	90	90	15	100	0.78	7.5	0.3	90	TO-220FN	
RB215T-90	Bulk	90	90	20	100	0.75	10	0.4	90	TO-220FN	
RB225T100	Bulk	100	100	30	100	0.88	15	0.4	100	TO-220FN	

Note: *1 Value / element. *2 1/2 I_O per diode.

齐纳二极管 产品线

■ 双端子(Single) 4端子(Dual) 齐纳二极管

Package		Surface Mount Type													
		1006 Size VMN2		1406 Size VMD2		1608 Size EMD2 (SOD-523)		1712 Size UMD2 (SOD-323)		0603 Size GMD2		1913 Size TUMD2			
Equivalent Circuit Diagram															
Series name		CDZ Series		VDZ Series		EDZ Series		UDZ S Series		GDZ Series		TDZ Series			
Power (mW)		100		100		150		200		100		500			
Package symbol		T2R		T2R		TE61		TE-17		T2R		TR			
Electrical Characteristics (Ta=25°C)		Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)		
Voltage	3.6B	3.600 to 3.845	5	3.600 to 3.845	5	3.600 to 3.845	5	3.600 to 3.845	5	3.6	—	—	3.6	—	—
	3.9B	3.89 to 4.16	5	3.89 to 4.16	5	3.89 to 4.16	5	3.89 to 4.16	5	3.9	3.740 to 4.160	5	3.9	—	—
	4.3B	4.17 to 4.43	5	4.17 to 4.43	5	4.17 to 4.43	5	4.17 to 4.43	5	4.3	—	—	4.3	—	—
	4.7B	4.55 to 4.75	5	4.55 to 4.75	5	4.55 to 4.75	5	4.55 to 4.75	5	4.7	4.420 to 4.900	5	4.7	—	—
	5.1B	4.98 to 5.20	5	4.98 to 5.20	5	4.98 to 5.20	5	4.98 to 5.20	5	5.1	4.840 to 5.370	5	5.1	4.600 to 5.600	10
	5.6B	5.49 to 5.73	5	5.49 to 5.73	5	5.49 to 5.73	5	5.49 to 5.73	5	5.6	5.310 to 5.920	5	5.6	5.100 to 6.100	10
	6.2B	6.06 to 6.33	5	6.06 to 6.33	5	6.06 to 6.33	5	6.06 to 6.33	5	6.2	5.860 to 6.530	5	6.2	5.600 to 6.800	10
	6.8B	6.65 to 6.93	5	6.65 to 6.93	5	6.65 to 6.93	5	6.65 to 6.93	5	6.8	6.470 to 7.140	5	6.8	6.200 to 7.400	10
	7.5B	7.28 to 7.60	5	7.28 to 7.60	5	7.28 to 7.60	5	7.28 to 7.60	5	7.5	7.060 to 7.840	5	7.5	6.800 to 8.300	10
	8.2B	8.02 to 8.36	5	8.02 to 8.36	5	8.02 to 8.36	5	8.02 to 8.36	5	8.2	7.760 to 8.640	5	8.2	7.400 to 9.000	10
	9.1B	8.85 to 9.23	5	8.85 to 9.23	5	8.85 to 9.23	5	8.85 to 9.23	5	9.1	—	—	9.1	8.200 to 10.00	10
	10B	9.77 to 10.21	5	9.77 to 10.21	5	9.77 to 10.21	5	9.77 to 10.21	5	10	—	—	10	9.000 to 11.00	10
	11B	10.76 to 11.22	5	10.76 to 11.22	5	10.76 to 11.22	5	10.76 to 11.22	5	11	—	—	11	9.900 to 12.10	10
	12B	11.74 to 12.24	5	11.74 to 12.24	5	11.74 to 12.24	5	11.74 to 12.24	5	12	—	—	12	10.80 to 13.20	10
	13B	12.91 to 13.49	5	12.91 to 13.49	5	12.91 to 13.49	5	12.91 to 13.49	5	13	—	—	13	11.70 to 14.30	10
	15B	14.34 to 14.98	5	14.34 to 14.98	5	14.34 to 14.98	5	14.34 to 14.98	5	15	—	—	15	13.50 to 16.50	10
	16B	15.85 to 16.51	5	15.85 to 16.51	5	15.85 to 16.51	5	15.85 to 16.51	5	16	—	—	16	14.40 to 17.60	10
	18B	—	—	17.56 to 18.35	2	17.56 to 18.35	5	17.56 to 18.35	5	18	—	—	18	16.20 to 19.80	10
	20B	—	—	19.52 to 20.39	2	19.52 to 20.39	5	19.52 to 20.39	5	20	—	—	20	18.00 to 22.00	10
	22B	—	—	21.54 to 22.47	2	21.54 to 22.47	5	21.54 to 22.47	5	22	—	—	22	19.80 to 24.20	10
24B	—	—	23.72 to 24.78	2	23.72 to 24.78	5	23.72 to 24.78	5	24	—	—	24	21.60 to 26.40	10	
27B	—	—	26.19 to 27.53	2	26.19 to 27.53	2	26.19 to 27.53	5	27	—	—	27	24.30 to 29.70	10	
30B	—	—	29.19 to 30.69	2	29.19 to 30.69	2	29.19 to 30.69	5	30	—	—	30	27.00 to 33.00	10	
33B	—	—	32.15 to 33.79	2	32.15 to 33.79	2	32.15 to 33.79	5	33	—	—	33	—	—	—
36B	—	—	35.07 to 36.87	2	35.07 to 36.87	2	35.07 to 36.87	5	36	—	—	36	—	—	—
39B	—	—	—	—	—	—	—	—	39	—	—	39	—	—	—
Package		Surface Mount Type				Surface Mounted, Glass Type				Leaded Type		Surface Mount Type			
		1913 Size TUMD2		2616 Size PMDU (SOD-123)		4526 Size PMDS (SOD-106)		3415 Size LLDS (LL-34)		2.7xφ1.8 MSD (DO-34)		2012 Size UMD4 (SOD-343)			
Equivalent Circuit Diagram															
Series name		TFZ Series		KDZ Series		PTZ Series		RLZ Series		MTZ J Series		UMZ K Series			
Power (mW)		500		1000		1000		500		500		200			
Package symbol		TR		TR		TE25		TE-11		T-77		TL			
Electrical Characteristics (Ta=25°C)		Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)		
Voltage	3.6B	3.600 to 3.845	20	3.60 to 4.00	40	3.60 to 4.00	40	3.600 to 3.845	20	3.600 to 3.845	5	3.6K	3.600 to 3.845	5	
	3.9B	3.89 to 4.16	20	3.90 to 4.40	40	3.90 to 4.40	40	3.89 to 4.16	20	3.89 to 4.16	5	3.9K	3.89 to 4.16	5	
	4.3B	4.17 to 4.43	20	4.30 to 4.80	40	4.30 to 4.80	40	4.17 to 4.43	20	4.17 to 4.43	5	4.3K	4.17 to 4.43	5	
	4.7B	4.55 to 4.80	20	4.70 to 5.20	40	4.70 to 5.20	40	4.55 to 4.80	20	4.55 to 4.80	5	4.7K	4.55 to 4.75	5	
	5.1B	4.94 to 5.20	20	5.10 to 5.70	40	5.10 to 5.70	40	4.94 to 5.20	20	4.94 to 5.20	5	5.1K	4.98 to 5.20	5	
	5.6B	5.45 to 5.73	20	5.60 to 6.30	40	5.60 to 6.30	40	5.45 to 5.73	20	5.45 to 5.73	5	5.6K	5.49 to 5.73	5	
	6.2B	5.96 to 6.27	20	6.20 to 7.00	40	6.20 to 7.00	40	5.96 to 6.27	20	5.96 to 6.27	5	6.2K	6.06 to 6.33	5	
	6.8B	6.49 to 6.83	20	6.80 to 7.70	40	6.80 to 7.70	40	6.49 to 6.83	20	6.49 to 6.83	5	6.8K	6.65 to 6.93	5	
	7.5B	7.07 to 7.45	20	7.50 to 8.40	40	7.50 to 8.40	40	7.07 to 7.45	20	7.07 to 7.45	5	7.5K	7.28 to 7.60	5	
	8.2B	7.78 to 8.19	20	8.20 to 9.30	40	8.20 to 9.30	40	7.78 to 8.19	20	7.78 to 8.19	5	8.2K	8.02 to 8.36	5	
	9.1B	8.57 to 9.01	20	9.10 to 10.20	40	9.10 to 10.20	40	8.57 to 9.01	20	8.57 to 9.01	5	9.1K	8.85 to 9.23	5	
	10B	9.41 to 9.90	20	10.00 to 11.20	40	10.00 to 11.20	40	9.41 to 9.90	20	9.41 to 9.90	5	10K	9.77 to 10.21	5	
	11B	10.50 to 11.05	10	11.00 to 12.30	20	11.00 to 12.30	20	10.50 to 11.05	10	10.50 to 11.05	5	11K	10.76 to 11.22	5	
	12B	11.44 to 12.03	10	12.00 to 13.50	20	12.00 to 13.50	20	11.44 to 12.03	10	11.44 to 12.03	5	12K	11.74 to 12.24	5	
	13B	12.55 to 13.21	10	13.30 to 15.00	20	13.30 to 15.00	20	12.55 to 13.21	10	12.55 to 13.21	5	13K	12.91 to 13.49	5	
	15B	13.89 to 14.62	10	14.70 to 16.50	20	14.70 to 16.50	20	13.89 to 14.62	10	13.89 to 14.62	5	15K	14.34 to 14.98	5	
	16B	15.25 to 16.04	10	16.20 to 18.30	20	16.20 to 18.30	20	15.25 to 16.04	10	15.25 to 16.04	5	16K	15.85 to 16.51	5	
	18B	16.82 to 17.70	10	18.00 to 20.30	20	18.00 to 20.30	20	16.82 to 17.70	10	16.82 to 17.70	5	18K	17.56 to 18.35	5	
	20B	18.63 to 19.59	10	20.00 to 22.40	20	20.00 to 22.40	20	18.63 to 19.59	10	18.63 to 19.59	5	20K	19.52 to 20.39	5	
	22B	20.64 to 21.71	5	22.00 to 24.50	10	22.00 to 24.50	10	20.64 to 21.71	5	20.64 to 21.71	5	22K	21.54 to 22.47	5	
24B	22.61 to 23.77	5	24.00 to 27.60	10	24.00 to 27.60	10	22.61 to 23.77	5	22.61 to 23.77	5	24K	23.72 to 24.78	5		
27B	24.97 to 26.26	5	27.00 to 30.80	10	27.00 to 30.80	10	24.97 to 26.26	5	24.97 to 26.26	5	27K	26.19 to 27.53	5		
30B	27.70 to 29.13	5	30.00 to 34.00	10	30.00 to 34.00	10	27.70 to 29.13	5	27.70 to 29.13	5	30K	29.19 to 30.69	5		
33B	30.32 to 31.88	5	33.00 to 37.00	10	33.00 to 37.00	10	30.32 to 31.88	5	30.32 to 31.88	5	33K	32.15 to 33.79	5		
36B	32.79 to 34.49	5	36.00 to 40.00	10	36.00 to 40.00	10	32.79 to 34.49	5	32.79 to 34.49	5	36K	35.07 to 36.87	5		
39B	35.36 to 37.19	5	—	—	—	—	35.36 to 37.19	5	35.36 to 37.19	5	39K	—	—		

Note: Available voltages are displayed

2~4电路复合产品

Product No.		Absolute Maximum Ratings (Ta=25°C)	Electrical Characteristics (Ta=25°C)		Remark	Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol		P (mW)	Vz (V)				Iz (mA)
UMZ8.2T	T106	200	7.76 to 8.64	5		UMD3	
STZ6.8T	T146	200	6.47 to 7.14	5		SMD3	
VMZ6.8N	T2L	150	6.47 to 7.14	5		VMD3	
EMZ6.8N	TL	150	6.47 to 7.14	5		EMD3	
UMZ5.1N	T106	200	4.84 to 5.37	5		UMD3	
UMZ6.8N	T106	200	6.47 to 7.14	5		UMD3	
UMZ8.2N	T106	200	7.76 to 8.64	5		UMD3	
UMZ12N	T106	200	11.0 to 13.0	5		UMD3	
UMZ16N	T106	200	15.85 to 16.51	5		UMD3	
UMZ18N	T106	200	17.56 to 18.35	5	IEC61000-4-2 150pF, 330Ω	UMD3	
UMZ27N	T106	200	26.19 to 27.53	5	Contact 8kV Air 15kV	UMD3	
UMZ30N	T106	200	29.19 to 30.69	5		UMD3	
UMZ36N	T106	200	35.07 to 36.87	5		UMD3	
STZ5.6N	T146	200	5.31 to 5.92	5		SMD3	
STZ6.2N	T146	200	5.81 to 6.40	5		SMD3	
STZ6.8N	T146	200	6.47 to 7.14	5		SMD3	
EMZ6.8E	T2R	150	6.47 to 7.14	5		EMD5	
UMZ6.8EN	TR	200	6.47 to 7.14	5		UMD5	
FTZ4.3E	T148	200	4.04 to 4.57	5		SMD5	
FTZ5.6E	T148	200	5.31 to 5.92	5		SMD5	
FTZ6.8E	T148	200	6.47 to 7.14	5		SMD5	
FTZ30E	T148	200	29.19 to 30.09	5		SMD5	

低容量齐纳二极管

Part No.	Absolute Maximum Ratings (Ta=25°C)	Electrical Characteristics (Ta=25°C)					Package	Equivalent Circuit Diagram
		P (mW)	Vz (V)	Iz (mA)	Ct (pF)	f (MHz)			VR (V)
UMZU6.2N	200	5.9 to 6.5	5	8	1	0	UMD3	
FTZU6.2E	200	5.9 to 6.5	5	8	1	0	SMD5	
CDZC6.8B	100	6.65 to 6.93	5	3	1	0	VMN2	
EDZC6.8B	150	6.65 to 6.93	5	3	1	0	EMD2	
EMZC6.8N	150	6.47 to 7.14	5	3	1	0	EMD3	
VMZT6.8N	150	6.47 to 7.14	5	7	1	0	UMD3	
UMZC6.8N	200	6.47 to 7.14	5	3	1	0	UMD3	
STZC6.8N	200	6.47 to 7.14	5	3	1	0	SMD3	
RSB12Z	100	9.6 to 14.4	5	1	1	0	VMD3	
RSB12W	150	9.6 to 14.4	5	1	1	0	EMD3	
EMZT6.8E	150	6.47 to 7.14	5	7	1	0	EMD5	
New RSB6.8JS2	150	6.00 to 8.00	5	1	1	0	EMD6	
RSB12JS2	150	9.6 to 14.4	5	1	1	0	EMD6	
New RSAC6.8CS	100	6.70 to 7.33	5	0.3	1	0	VMN2	
New RSAC16CS	100	16.49 to 17.51	5	0.3	1	0	VMN2	

*: (3), (6)pin must be open when using.

■ ESD保护元件 (TVS)

Product No.		Absolute Maximum Ratings (Ta=25°C) P (mW)	Electrical Characteristics (Ta=25°C) Vz (V)		Peak Pulse Power (W) (tp=10×1000μs)	Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol		Iz(mA)				
RSA6.1J4	T2R	150	6.10 to 7.20	1	10	EMD5	
RSA6.1EN	TR	200	6.10 to 7.20	1	30	UMD5	
RSA6.1U5	T108	200	6.10 to 7.20	1	30	SMD6	
RSA5M	TR	700	6.4 to 7.0	10	200	PMDU	
RSA12M	TR	700	13.3 to 14.7	1	200	PMDU	
RSA5L	TE25	1,000	6.45 to 7.14	10	600	PMDS	
RSA12L	TE25	1,000	13.3 to 14.7	1	600	PMDS	
RSA30L	TE25	1,000	28.5 to 31.5	1	600	PMDS	

■ 双向齐纳二极管

Part No.	Absolute Maximum Ratings (Ta=25°C)		Electrical Characteristics (Ta=25°C)		Remark	Package	Equivalent Circuit Diagram
	P (mW)	Vz (V)	Iz(mA)				
RSB6.8CS	100	5.78 to 7.82	1			VMN2	
RSB6.8G	100	5.78 to 7.82	1			VMD2	
RSB5.6S	150	4.76 to 6.44	1			EMD2	
RSB6.8S	150	5.78 to 7.82	1			EMD2	
RSB16V	200	14.4 to 17.6	1		IEC61000-4-2	UMD2	
RSB18V	200	16.2 to 19.8	1		150pF, 330Ω	UMD2	
RSB27V	200	26.2 to 32.0	1		Contact 8kV	UMD2	
RSB16VA	500	14.4 to 17.6	1		Air 15kV	TUMD2	
RSB6.8F2	200	5.78 to 7.82	1			UMD3	
RSB16F2	200	14.4 to 17.6	1			UMD3	
RSB18F2	200	16.2 to 19.8	1			UMD3	
RSB27F2	200	26.2 to 32.0	1			UMD3	

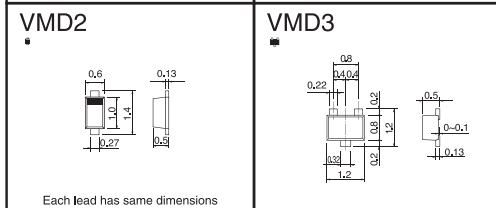
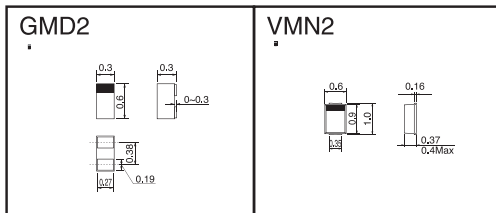
■ 超低容量双向齐纳二极管

Product No.		Absolute Maximum Ratings (Ta=25°C) P (mW)	Electrical Characteristics (Ta=25°C)				Package	Equivalent Circuit Diagram	
Part No.	Packaging Symbol		Vz (V)	Iz(mA)	Ct (pF)	f (MHz)			Vr (V)
RSBC6.8CS	TR	100	6.62 to 7.24	5	8	1	0	VMN2	

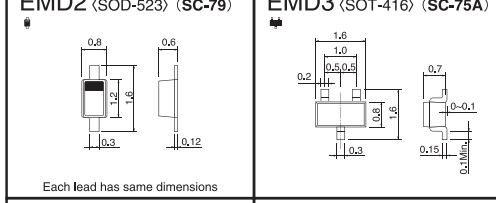
外形尺寸图

(Unit:mm)

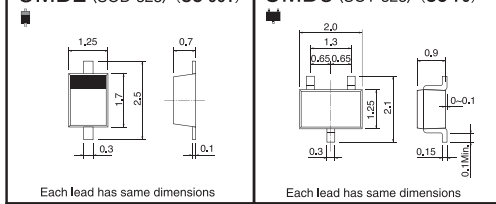
● 表面贴装型



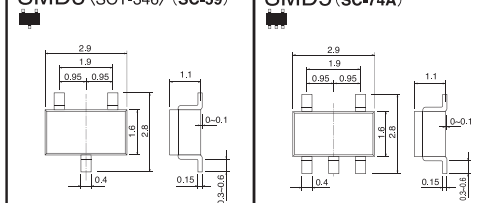
Each lead has same dimensions



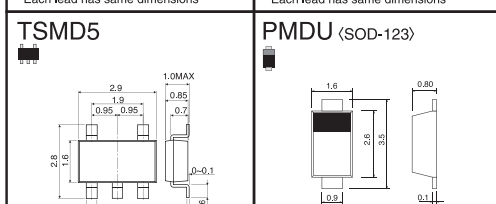
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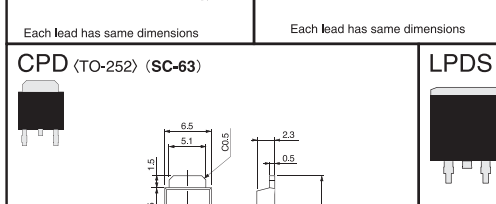
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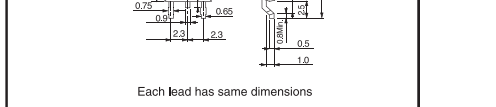
Each lead has same dimensions



Each lead has same dimensions

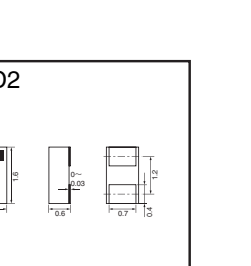
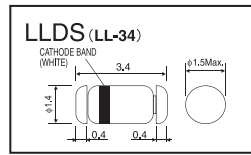


Each lead has same dimensions



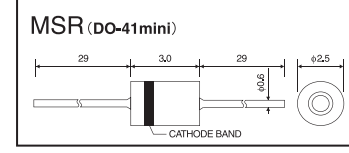
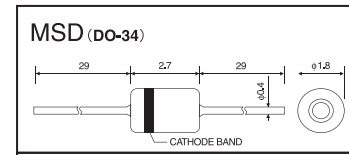
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● 表面安装玻璃型

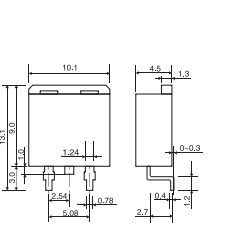


Each lead has same dimensions

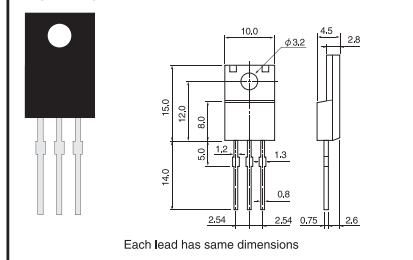
● 引脚型



● LPDS



● TO-220FN



< >内为JEDEC号码, ()内为JEITA号码。

* 尺寸公差等详细规格, 请参见规格书和ROHM网站。

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