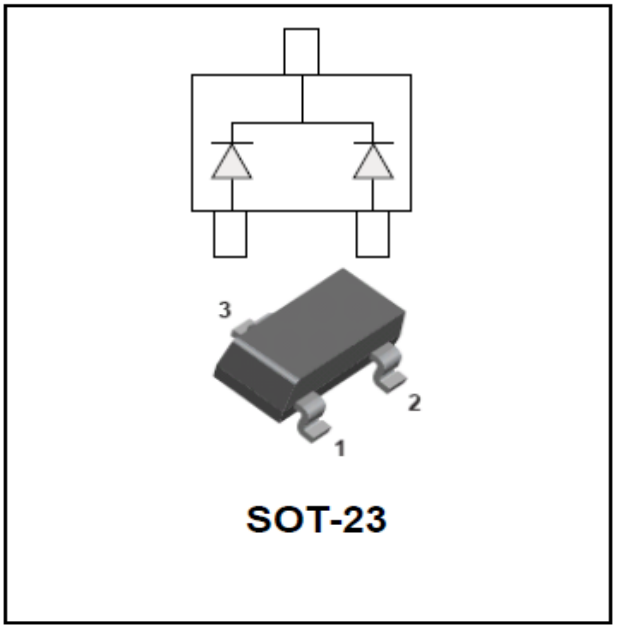
Schottky Barrier Diode



Features

- ●Epoxy meets UL-94 V-0 flammability rating，halogen-free
- ●Moisture Sensitivity Level 1
- ●Low Forward Voltage
- ●Surface Mount device

Mechanical data

- ●**Package**: SOT-23
- ●**Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- ●**Marking**: D3Q

■Maximum Rating, (T_a=25℃ Unless otherwise specified)

Item	Symbol	Unit	Value
Peak Reverse Voltage	V_{RM}	V	40
DC Reverse Voltage	V_R	V	25
Forward Continuous Current	I_F	mA	500
Non-Repetitive Peak Forward Surge Current @8.3ms half-sine wave	I_{FSM}	A	2
Repetitive Peak Forward Current@ tp=1ms，δ=0.25	I_{FRM}	A	1
Total Power Dissipation @ T_A=25℃	P_D	mW	250
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	℃/W	400
Junction Temperature	T_J	℃	-55 to +125
Storage temperature range	Tstg	℃	-55 to +125

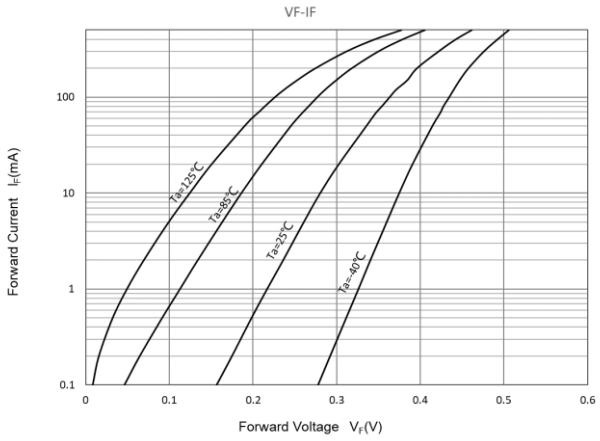
■Ordering Information (Example)

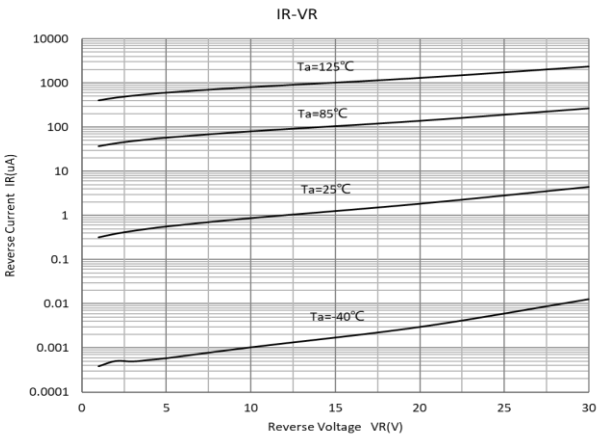
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RB495DS	F2	Approximate 0.008	3000	30000	120000	7” reel

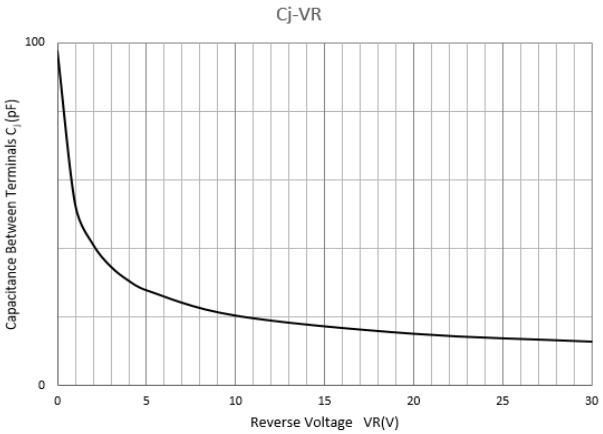
■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

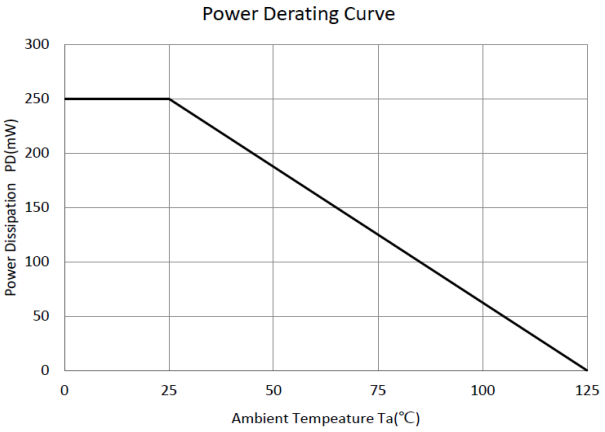
Item	Symbol	Unit	Conditions	Value
Maximum Instantaneous Forward Voltage	V_F	V	I_{FM}=10mA	0.3
			I_{FM}=200mA	0.5
Maximum DC Reverse Current	I_R	uA	V_R=25V	70

■ Typical Characteristics

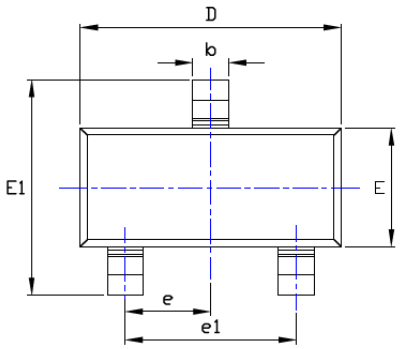




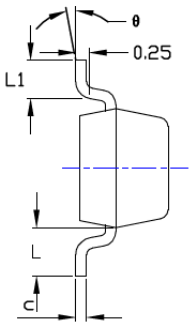




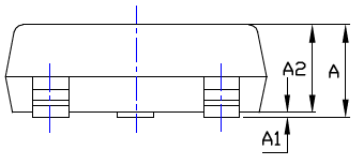
■SOT-23 Package Outline Dimensions



TOP VIEW



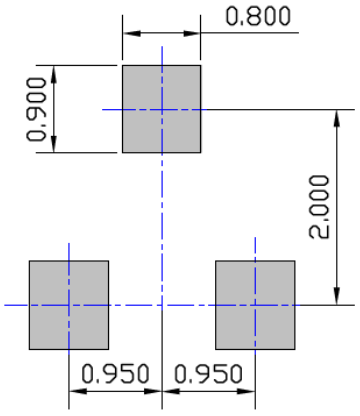
SIDE VIEW



SIDE VIEW

DIMENSIONS				
SYMBOL	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.045	0.900	1.150
A1	0.000	0.004	0.000	0.100
A2	0.035	0.041	0.900	1.050
b	0.012	0.020	0.300	0.500
c	0.004	0.008	0.100	0.200
D	0.110	0.118	2.800	3.000
E	0.047	0.055	1.200	1.400
E1	0.089	0.100	2.250	2.550
e	0.037TYP		0.950TYP	
e1	0.071	0.079	1.800	2.000
L	0.022REF		0.550REF	
L1	0.012	0.200	0.300	0.500
θ	0°	8°	0°	8°

■SOT-23 Soldering Footprint



UNIT：mm

Note:
1. All dimensions are in millimeters (mm) unless otherwise specified.
[所有尺寸均以毫米为单位，除非另有说明]
2. General tolerances: ±0.10mm unless otherwise specified.
[通用公差为±0.10mm，除非另有说明]
3. Dimensions and tolerances per ASME Y14.5M-2018.
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
4.All dimensions shown are exclusive of burrs and gate residues. Burrs and gate vestiges shall not exceed 0.15 mm in maximum.
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
5.Dimension b does not include dambar protrusion of max 0.100 mm per side.
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
6.Dimensions D and E are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.
[D和E是塑封体的外部极限尺寸，不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺，但是包含了包封错位的最大尺寸]
7.Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.
[成型的管脚应为同一平面，共面性最大为0.1mm]

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