

Schottky Barrier Rectifier



Features

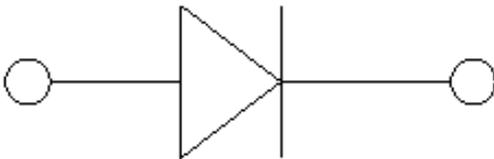
- V_R 70V
- I_F 70mA

Typical Applications

- Low Forward Voltage Drop

Mechanical Data

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** K73



■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Repetitive peak reverse voltage	V_{RRM}	V	70
Reverse voltage	V_R	V	70
Average forward current	I_F	mA	70
Non-repetitive Peak Forward Surge Current @ 8.3ms Half Sine	I_{FSM}	mA	100
Repetitive Peak Forward Current@ $t_p=1ms, \delta=0.25$	I_{FRM}	A	0.07
Power Dissipation	P_D	mW	200
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	°C/W	500
Maximum junction temperature	T_j	°C	125
Storage temperature range	T_{stg}	°C	-55 to +150

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	Min	Max
Forward voltage	V_{F1}	V	$I_F=1mA,$	-	0.41
	V_{F2}	V	$I_F=15mA,$	-	1
Reverse current	I_R	nA	$V_R=50V$	-	100
Breakdown voltage	$V_{(BR)}$	V	$I_R=10\mu A$	70	-
Diode capacitance	C_J	pF	$V_R=1V, f=1MHz$	-	2
Reverse Recovery Time	T_{RR}	ns	$I_F=I_R=10mA, R_L=100\Omega, I_{rr}=1mA$	-	5



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Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS70WS	F2	Approximate 0.0048	3000	30000	120000	7" reel

Characteristics (Typical)

Fig 1: P_D - T_a Curve

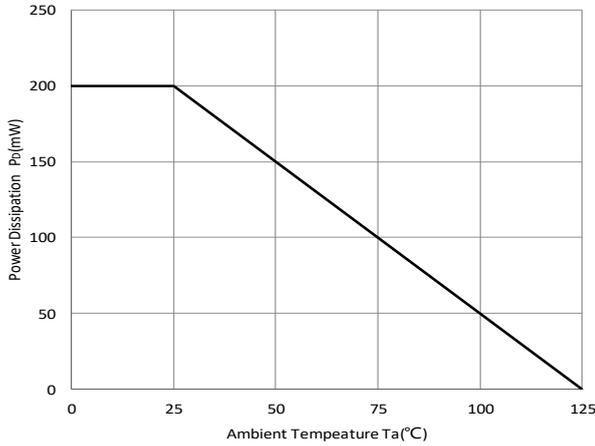


Fig 2: Capacitance Capability

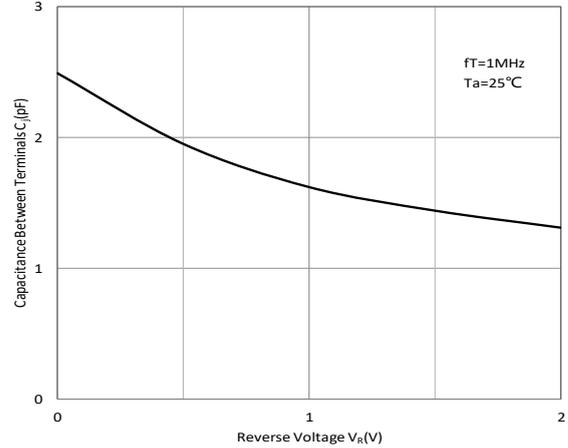


Fig 3: Typical Forward Characteristics

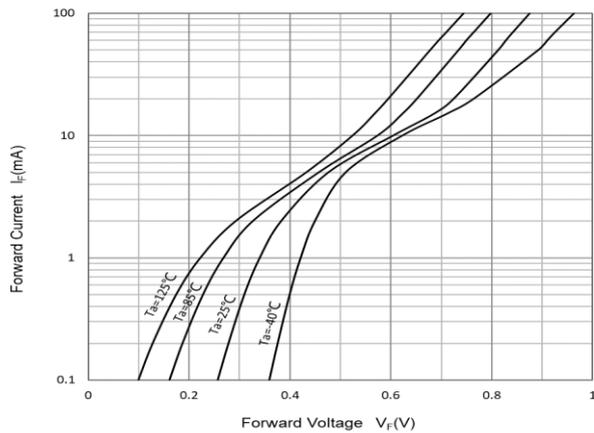
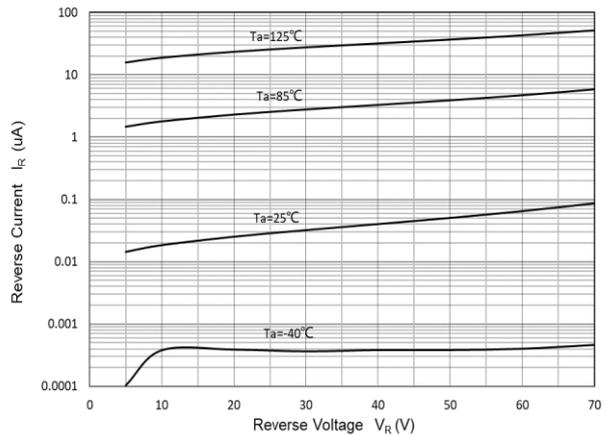


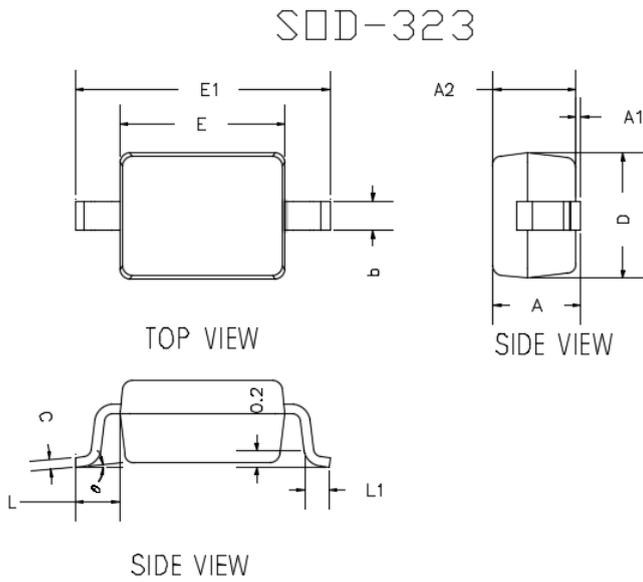
Fig 4: Typical Reverse Characteristics





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■Outline Dimensions

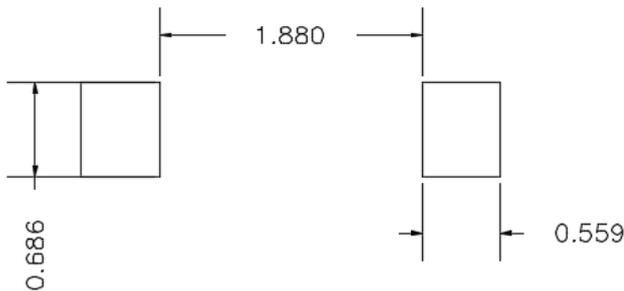


DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0059	0.0800	0.1500
D	0.0472	0.0551	1.2000	1.4000
E	0.0629	0.0709	1.6000	1.8000
E1	0.0984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
e	0°	8°	0°	8°

Note:

- 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]
- General tolerances: $\pm 0.10\text{mm}$ unless otherwise specified.
[通用公差为 $\pm 0.10\text{mm}$, 除非另有说明]
- Dimensions and tolerances per ASME Y14.5M-2018.
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
- 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]
- 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]
- 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]
- 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]

■Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT



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