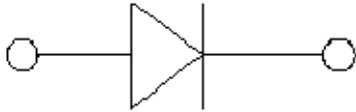


Schottky Barrier Rectifier



Features

- V_R 40V
- I_F 200mA

Typical Applications

- Low Forward Voltage Drop

Mechanical Data

- **Package:** SOD-123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** 43F

■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V		40
Reverse voltage	V_R	V	$I_R=10\mu\text{A}$	40
Average forward current	I_F	mA		200
Repetitive Peak Forward Current	I_{FRM}	A	$t_p=1\text{ms}, \delta=0.25$	1
Power Dissipation	P_D	mW		500
Maximum junction temperature	T_j	$^\circ\text{C}$		125
Storage temperature range	T_{stg}	$^\circ\text{C}$		-55 to +150

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	Min	Max
Forward voltage	V_{F1}	V	$I_F=1\text{mA}$,	-	0.38
	V_{F2}	V	$I_F=40\text{mA}$,	-	1
Reverse current	I_R	nA	$V_R=30\text{V}$	-	200
Breakdown voltage	$V_{(BR)}$	V	$I_R=10\mu\text{A}$	40	-
Diode capacitance	C_D	pF	$V_R=0\text{V}, f=1\text{MHz}$		5
Reverse Recovery Time	T_{RR}	ns	$I_F=I_R=10\text{mA}, R_L=100\Omega, I_R=1\text{mA}$		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
BAS40W	F2	Approximate 0.011	3000	30000	120000	7" reel

Characteristics (Typical)

Fig 1: Capacitance Capability

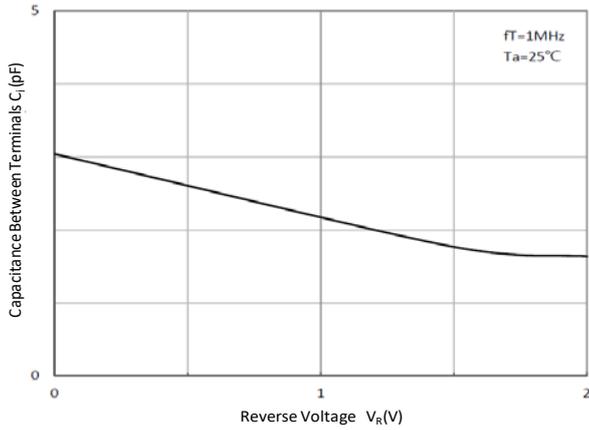


Fig 2: Typical Forward Characteristics

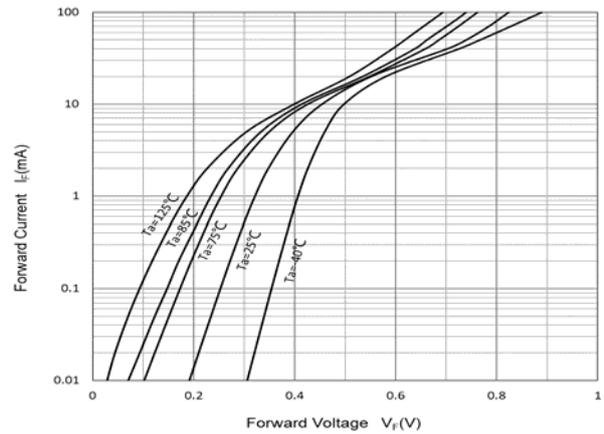
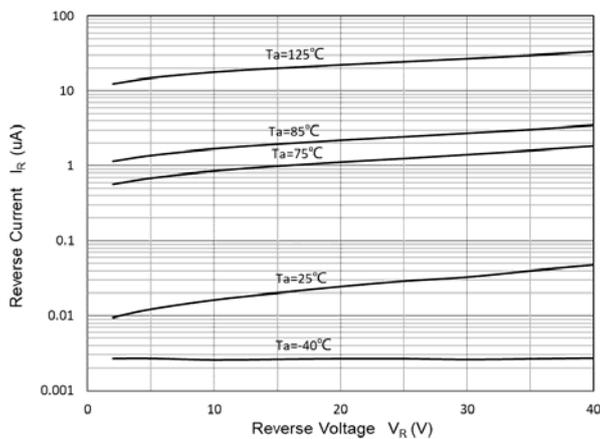


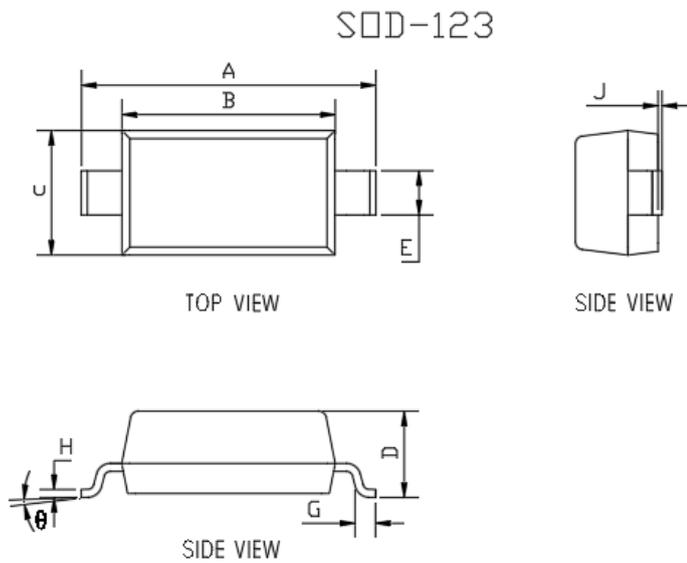
Fig 3: Typical Reverse Characteristics





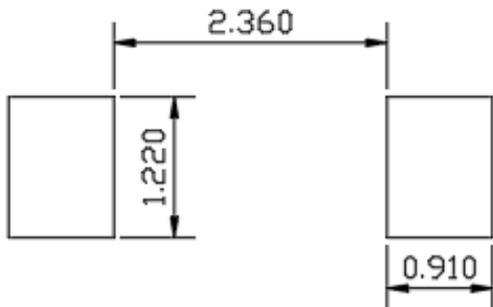
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■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.140	0.152	3.550	3.850
B	0.100	0.112	2.550	2.850
C	0.055	0.071	1.400	1.800
D	0.037	0.053	0.950	1.350
E	0.020	0.028	0.510	0.710
G	0.006	0.018	0.150	0.450
H	0.003	0.010	0.080	0.250
J	0.000	0.006	0.000	0.150
θ	0	8°	0	8°

■ Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT

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.
Burr 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 B and C 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.
[B和C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]



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