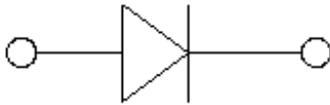


## Small Signal Schottky Diode



### Features

- Moisture sensitivity level 1
- Reverse voltage: 70V
- Average forward current : 70mA

### Application

- High frequency and low voltage rectifier

### Mechanical data

- **Package:** SOD-123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			73
Repetitive peak reverse voltage	V <sub>RRM</sub>	V	70
Forward current	I <sub>F</sub>	mA	70
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I <sub>FSM</sub>	A	0.1
Non-repetitive surge peak forward current @ t=1ms square wave			2
Repetitive Peak Forward Current@ tp=1ms, δ=0.25	I <sub>FRM</sub>	A	0.07
Power dissipation	P <sub>D</sub>	mW	400
Junction temperature	T <sub>J</sub>	°C	-55 to +125
Storage temperature	T <sub>STG</sub>	°C	-55 to +150



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## ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Breakdown voltage	V <sub>R</sub>	V	I <sub>R</sub> =10uA	70		
Forward voltage	V <sub>F</sub>	V	I <sub>F</sub> =1mA			0.41
			I <sub>F</sub> =15mA			1.0
Reverse leakage current	I <sub>R</sub>	uA	V <sub>R</sub> =50V			0.2
Junction capacitance	C <sub>j</sub>	pF	V <sub>R</sub> =1V, f =1MHZ			2
Reverse recovery time	T <sub>rr</sub>	ns	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =0.1*I <sub>R</sub> ,			5

## ■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R <sub>θJ-A</sub> <sup>(1)</sup>	°C/W	250
Thermal resistance, junction-to-case	R <sub>θJ-C</sub> <sup>(1)</sup>	°C/W	200

Note:

(1) Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 8mm\*9mm copper pad areas



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## ■ Characteristics

Fig 1:  $P_D$ - $T_a$  Curve

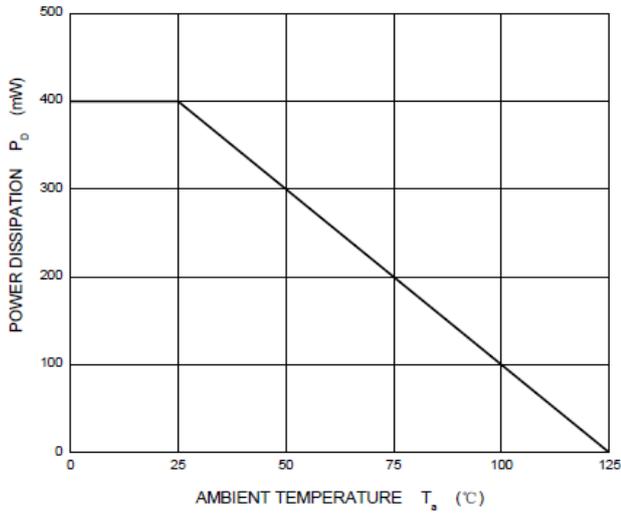


Fig 2: Capacitance Capability

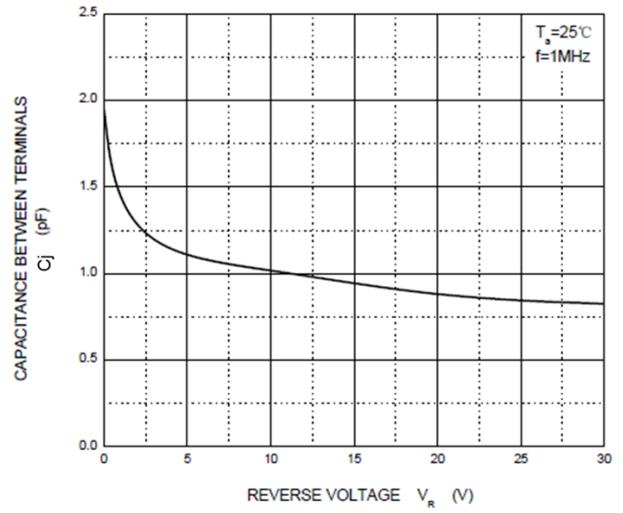


Fig 3: Typical Forward Characteristics

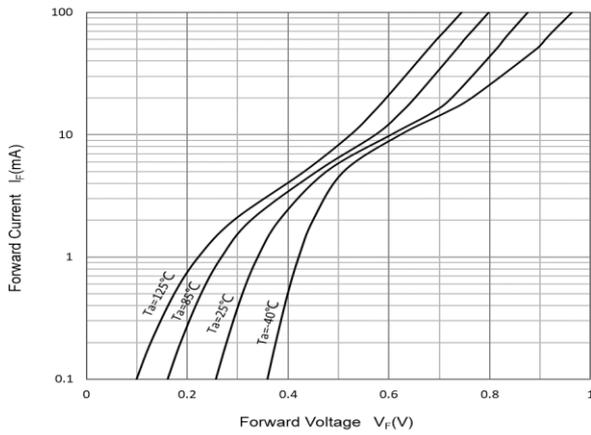
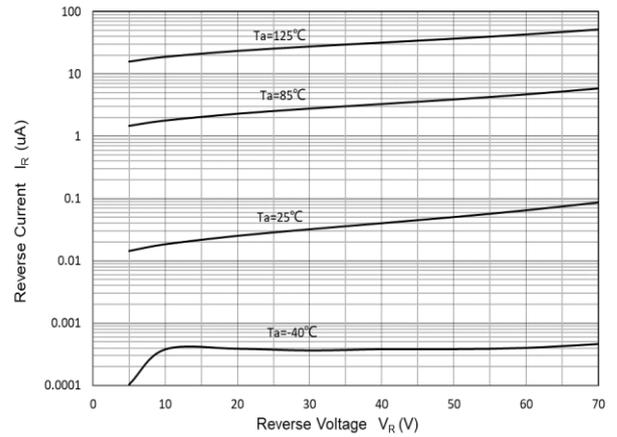


Fig 4: Typical Reverse Characteristics



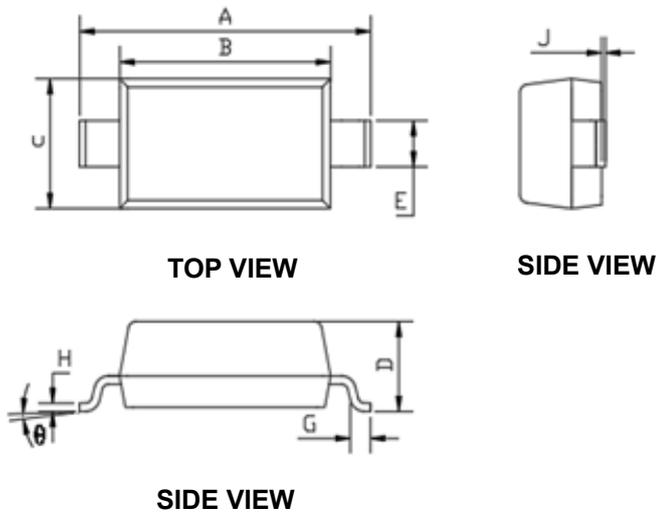


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## Ordering Information

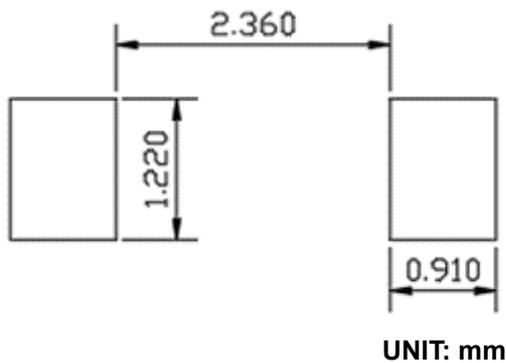
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
BAS70W	F2	Approximate 0.011	3000	30000	120000	7" reel
BAS70W	F3	Approximate 0.011	10000	/	210000	13" reel

## 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
$\theta$	0	8°	0	8°

## Suggested 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.  
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 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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