

**SOT-23 SURFACE MOUNT SCHOTTKY DIODE**

**FEATURES**

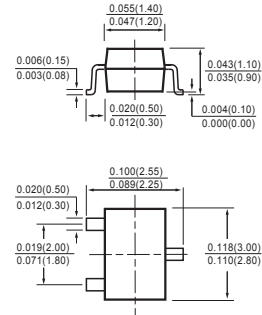
- \* Low Turn-on voltage
- \* Fast switching
- \* Ultra-small surface mount package
- \* Also available in lead free version
- \* Marking BAS70 = 73

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-O rate flame retardant
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.008 gram



**SOT-23**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.



Pin Configuration  
1 = ANODE  
2 = NC  
3 = CATHODE

**MAXIMUM RATINGS** ( @ TA = 25°C unless otherwise noted )

RATINGS	SYMBOL	BAS70	UNITS
Continuous Reverse Voltage	V <sub>R</sub>	70	V
Continuous Forward Current	I <sub>F</sub>	70	mA
Repetitive Peak Voltage T <sub>p</sub> ≤ 1s ; δ ≤ 0.5	I <sub>FRM</sub>	70	mA
Non Repetitive Peak Forward Current t <sub>p</sub> = 10 ms	I <sub>FSM</sub>	100	mA
Storage Temperature	T <sub>STG</sub>	-65 to +150	°C
Junction Temperature Range	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>amb</sub>	-65 to +150	°C

**THERMAL RESISTANCE**

Junction to Ambient in free air	R <sub>th (j-a)</sub>	500	K/W
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**ELECTRICAL CHARACTERISTICS** ( At TA = 25°C unless otherwise noted )

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse voltage leakage current	I <sub>R</sub>	-	-	10	uA
				0.1	
Forward voltage	V <sub>F</sub>	-	-	410	mV
				750	
				1000	
Diode capacitance (V <sub>R</sub> =0,f=1MHz)	C <sub>D</sub>	-	-	2	pF

Note 1: "Fully ROHS compliant", "100% Sn plating (Pb-free)".

## RATING AND CHARACTERISTICS CURVES ( BAS70 )

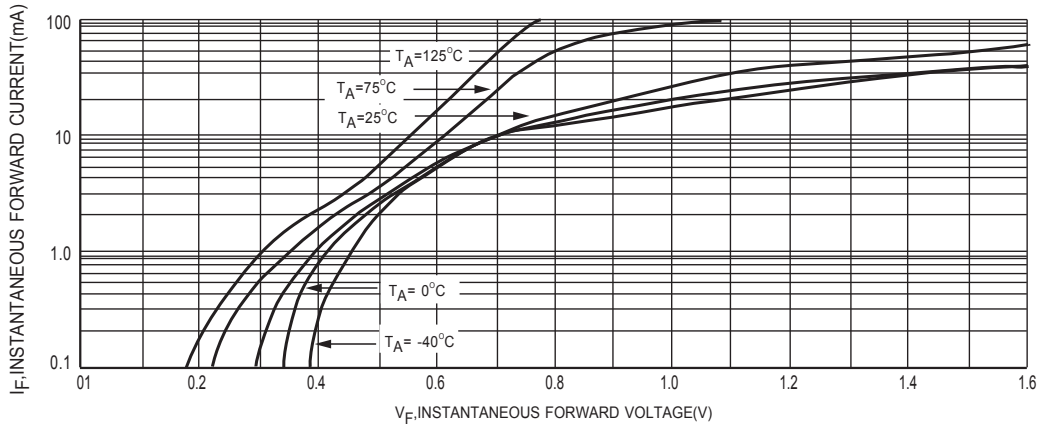


Figure 1 Typical Forward Characteristics

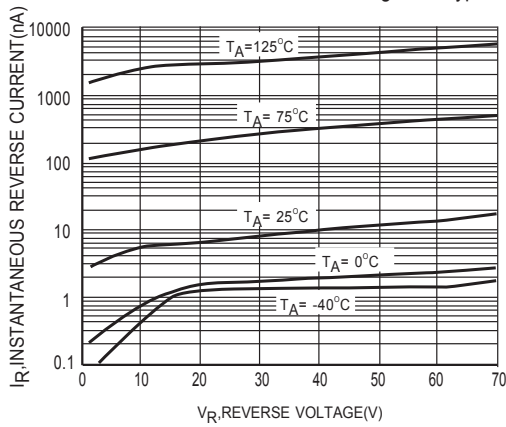


Figure 2 Typical Reverse Characteristics

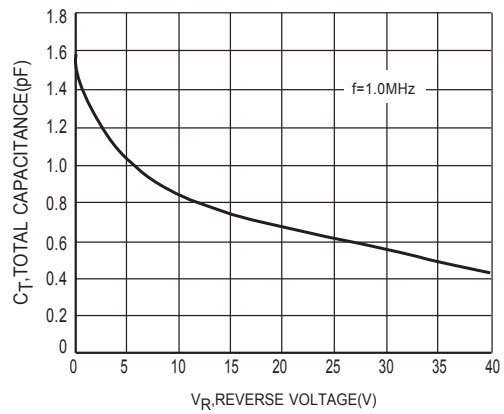


Figure 3 Typical Capacitance

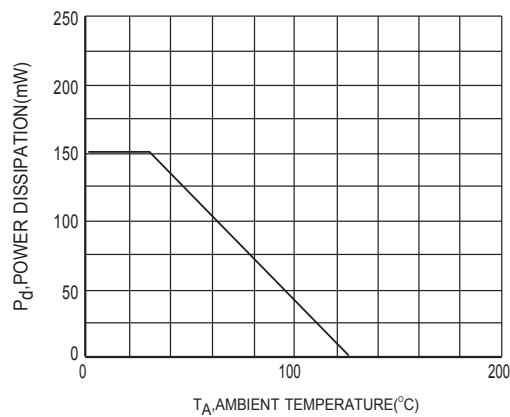


Figure 4 Power Derating Curve, Total Package

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