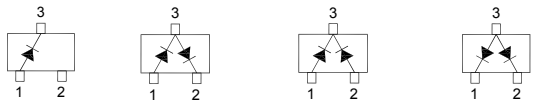
BAS70 / -04 / -05 / -06

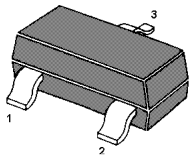
Surface Mount Schottky Barrier Diode

Features

- Low turn-on voltage
- Fast switching
- PN junction guard ring for transient and ESD protection

BAS70 BAS70-04 BAS70-05 BAS70-06





SOT-23 Plastic Package
BAS70 Marking Code: **73**
BAS70-04 Marking Code: **74**
BAS70-05 Marking Code: **75**
BAS70-06 Marking Code: **76**

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	70	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	70	V
Maximum DC Blocking Voltage	V_R	70	V
Average Forward Rectified Current	$I_{F(AV)}$	70	mA
Peak Forward Surge Current (t < 10 ms)	I_{FSM}	100	mA
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	°C/W
Operating Junction Temperature Range	T_j	- 55 to + 125	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I_F = 1 mA at I_F = 15 mA	V_F	 - -	 0.41 1	V
Reverse Breakdown Voltage at I_R = 10 µA	$V_{(BR)R}$	70	-	V
Reverse Current at V_R = 50 V	I_R	-	100	nA
Total Capacitance at V_R = 0 , f = 1 MHz	C_T	-	2	pF
Reverse Recovery Time at I_F = I_R = 10 mA to I_R = 1 mA, R_L = 100 Ω	t_{rr}	-	5	ns

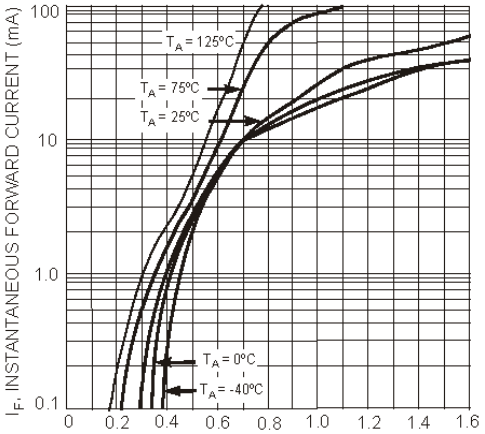


Fig. 1 Typical Forward Characteristics

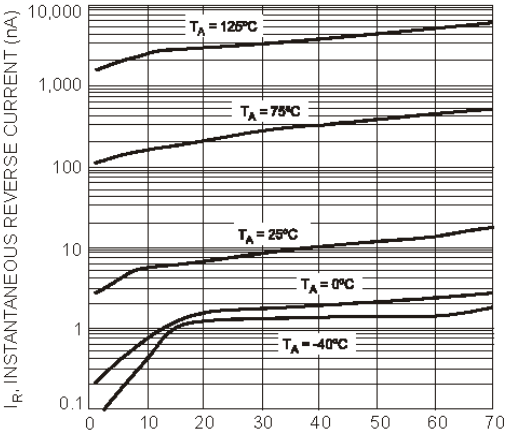


Fig. 2 Typical Reverse Characteristics

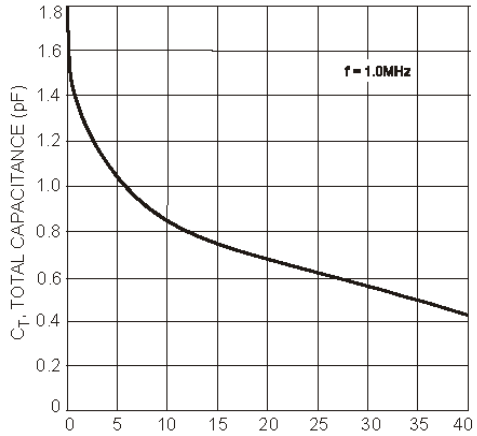


Fig. 3 Total Capacitance vs. Reverse Voltage

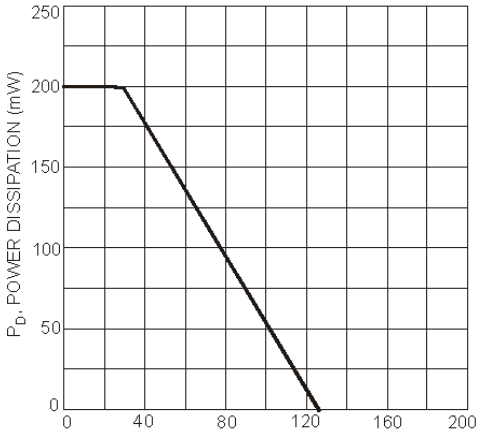


Fig. 4 Power Derating Curve, Total Package