



## SURFACE MOUNT SCHOTTKY BARRIER DIODE

# BAS70 / -04 / -05 / -06

VOLTAGE RANGE  
CURRENT

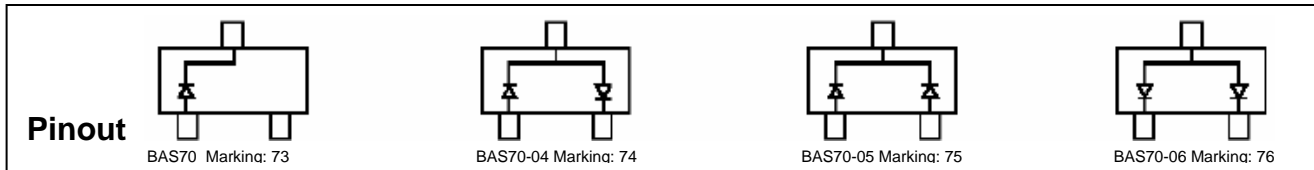
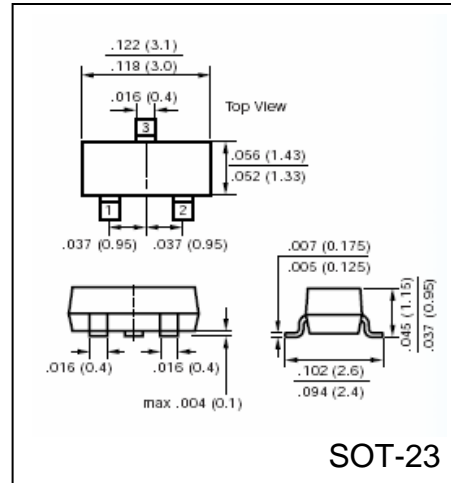
70 Volts  
70 mA

### FEATURES

- Fast Switching speed
- Low turn on Voltage
- Guard ring for transient and ESD protection

### MECHANICAL DATA

- Case: Transfer molded plastic, SOT-23
- Terminals: solderable per MIL-STD-202 Method 208
- Pinout: See diagram
- Weight: 0.00028 ounce, 0.008gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOLS		UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	70	Volts
Forward Continuous Current @ $T_A = 25^\circ\text{C}$ (Note 1)	$I_F$	70	mA
Non-repetitive Peak Forward Surge Current @ $T_p \leq 1$ Sec	$I_{FSM}$	100	mA
Minimum Reverse Breakdown Voltage, $I_R = 10\mu\text{A}$	$V_{BRR}$	70	Volts
Maximum Forward Voltage @ 1.0mA 15mA	$V_F$	410 1000	mV
Maximum Leakage Current, $T_r < 300\mu\text{S}$ , $V_R = 50\text{V}$	$I_R$	100	nA
Maximum Reverse Recovery Time $I_F = 10\text{mA}$ , $I_R = 10\text{mA}$ , $I_{RR} = 1\text{mA}$ , $R_L = 100\Omega$	$t_{rr}$	5	nS
Power dissipation (Note 1)	$P_{TOT}$	200	mW
Typical Junction Capacitance, $V_F = 1\text{V}$ , $f = 1\text{MHz}$	$C_J$	2	pF
Typical Thermal Resistance	$R_{\theta JA}$	430	$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_J$	(-55 to +125)	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	(-55 to +150)	$^\circ\text{C}$

### Notes:

1. Provided terminals are kept at ambient temperature