

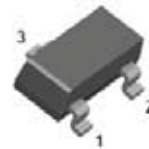
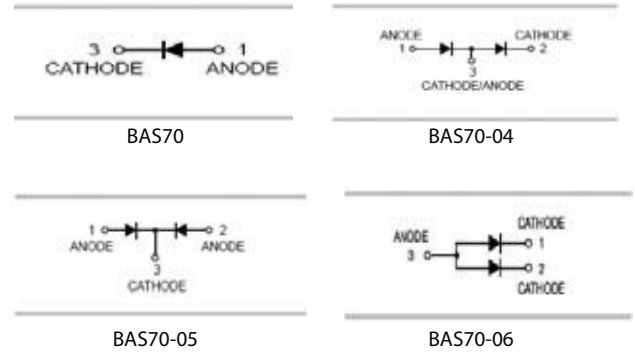
Surface Mount Barrier Diodes: BAS70/-04/-05/-06

Features:

- Low turn-on voltage
- Fast switching
- Ultra-small surface mount package
- PN Junction guard ring for transient and ESD protection
- Ultra small surface mount package

Applications:

- High speed switching applications
- Circuit protecting
- Voltage clamping



SOT-23

Maximum Rating @ Ta=25°C (unless otherwise specified):

Characteristic:	Symbol:	Limits:	Unit:
Peak repetitive reverse voltage	V_{RRM}	70	V
Working peak reverse voltage	V_{RWM}		
Diode reverse voltage	V_R		
Forward continuous current	I_F	70	mA
Non-repetitive peak forward surge current @ $t_p=1\mu s$	I_{FS}	100	mA
Power dissipation	P_D	200	mW
Thermal resistance, Junction to ambient air	R_{thJA}	625	°C/W
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-65 to +150	°C

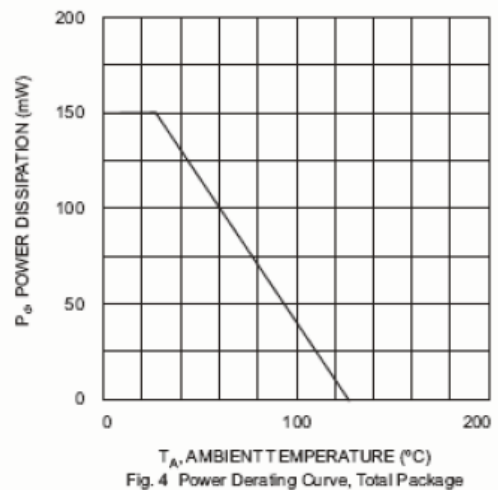
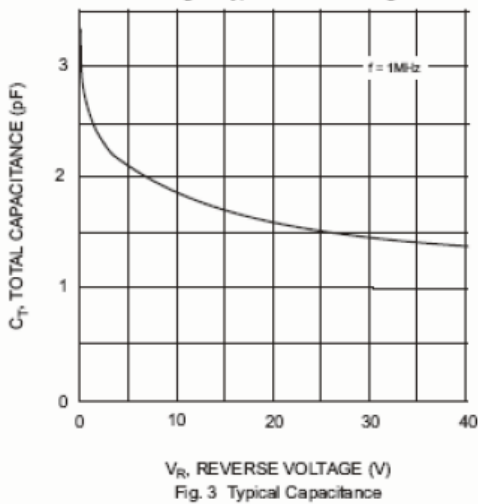
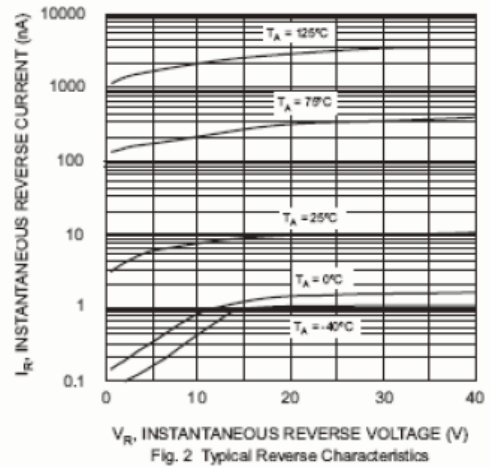
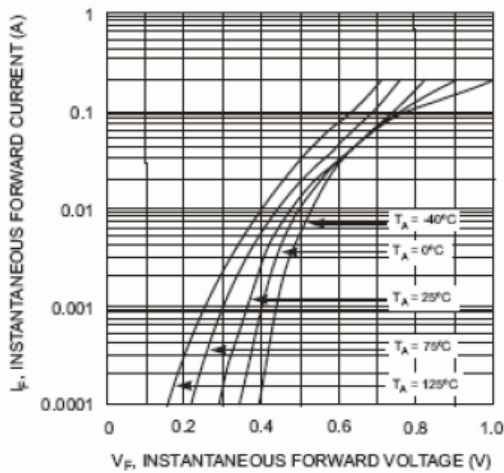
Electrical Characteristics @ Ta=25°C (unless otherwise specified):

Characteristic:	Symbol:	Min	Max	Unit:	Test Condition:
Reverse Breakdown Voltage	$V_{(BR)R}$	70	-	V	$I_R = 10 A$
Forward voltage	V_F	-	410 1000	mV	$t_p < 300\mu s, I_F = 1.0mA$ $t_p < 300\mu s, I_F = 15mA$
Reverse leakage current	I_R	-	100	nA	$t_p < 300\mu s, V_R = 50V$
Junction capacitance	C_j	-	2	pF	$V_R = 0V, f = 1.0MHz$
Reverse recovery time	t_{rr}	-	5	ns	$I_F = I_R = 10mA$ $R_L = 100 Ohms$

Surface Mount Barrier Diodes: BAS70/-04/-05/-06

Ordering Information	Marking:	Package Code:
BAS70	73	SOT-23
BAS70-04	74	SOT-23
BAS70-05	75	SOT-23
BAS70-06	76	SOT-23

Typical Characteristics @ Ta=25°C (unless otherwise specified):

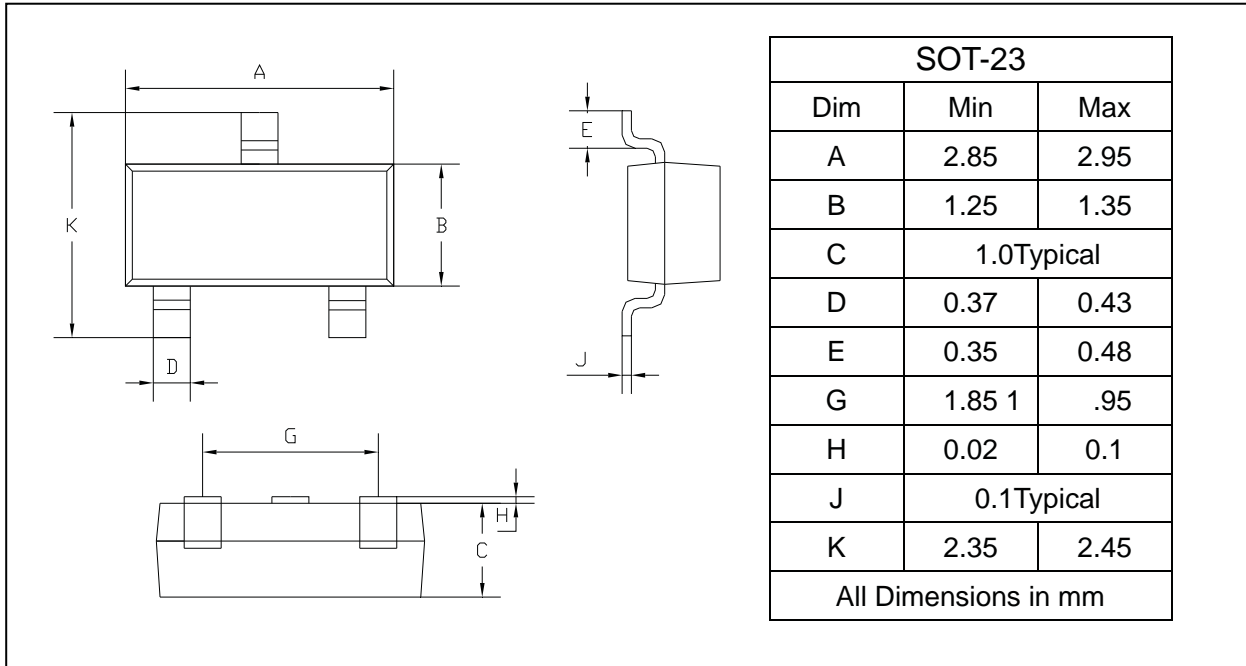


Surface Mount Barrier Diodes: BAS70-04/-04/-05/-06

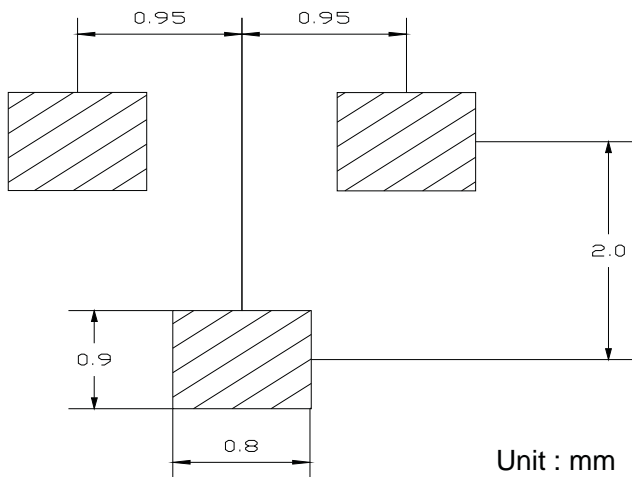
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAS70/-04/-05/-06	SOT-23	3000/Tape&Reel