

### **FEATURES**

- Forward Continuous Current:I<sub>F</sub>=70mA
- Power Dissipation of 200mw



#### SOT-23



# **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
BAS70-04	SOT-23	74	3000

# MAXIMUM RATINGS (Ta=25 unless otherwise noted)

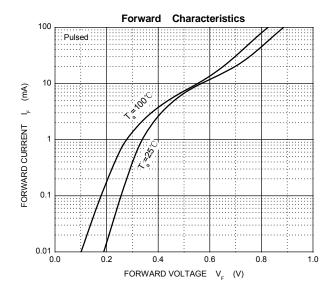
Symbol	Parameter	Value	Unit
V <sub>R</sub>	DC Voltage	70	V
I <sub>F</sub>	Forward Continuous Current	70	mA
I <sub>FSM</sub>	Non-Repetitive Peak Forward Surge Current @ t = 8.3ms	100	mA
$P_D$	Power Dissipation	200	mW
Reja	Thermal Resistance Junction to Ambient	500	°C/W
TJ	Junction Temperature	125	°C
T <sub>stg</sub>	Storage Temperature	-55~+150	°C

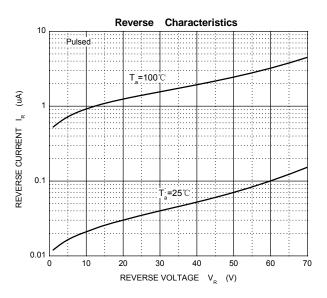
## ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25 unless otherwise specified)

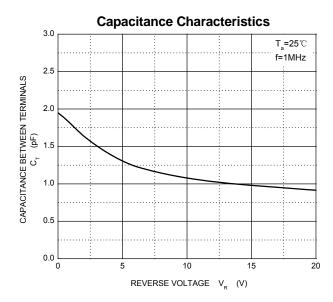
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I <sub>R</sub> = 10μA	70		V
Reverse voltage leakag e current	I <sub>R</sub>	V <sub>R</sub> =50V		100	nA
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =1mA I <sub>F</sub> =15mA		410 1000	mV
Diode cap acitance	$C_D$	V <sub>R</sub> =0V f=1MHz		2	pF
Reveres recovery time	t <sub>rr</sub>	$I_F = I_R = 10 \text{mA}, I_{rr} = 0.1 \text{x} I_R,$ $R_L = 100 \Omega$		5	ns

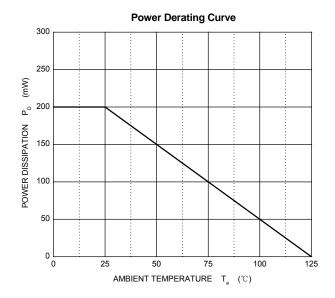


## **Typical Characteristics**



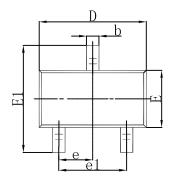


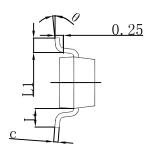


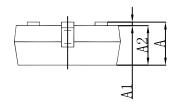




# **SOT-23 Package Outline Dimensions**

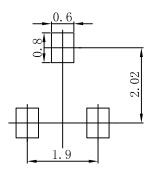






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
Α	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
С	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
е	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

# **SOT-23 Suggested Pad Layout**



- Note: 1.Controlling dimension: in millimeters.
- 2.General tolerance:± 0.05mm.
  3.The pad layout is for reference purposes only.



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