

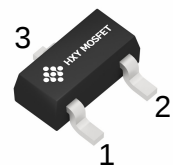


Features

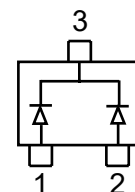
- Forward Continuous Current: $I_F = 70\text{mA}$
- Power Dissipation of 200mw

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAS70-05	SOT-23	75	3000



SOT-23



Maximum Ratings ($T_a = 25^\circ\text{C}$ unless otherwise noted)

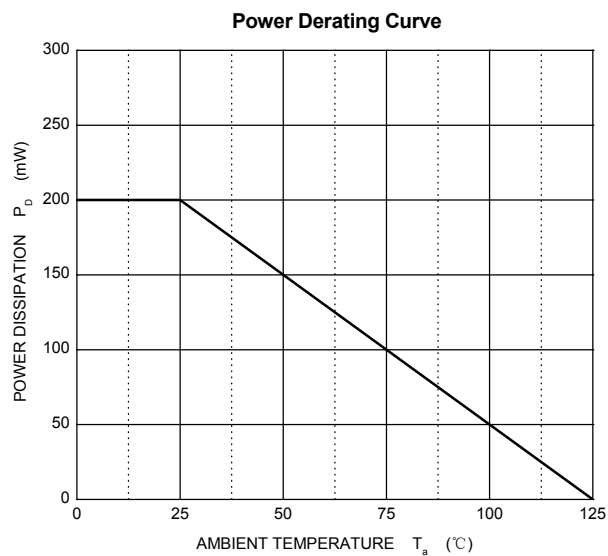
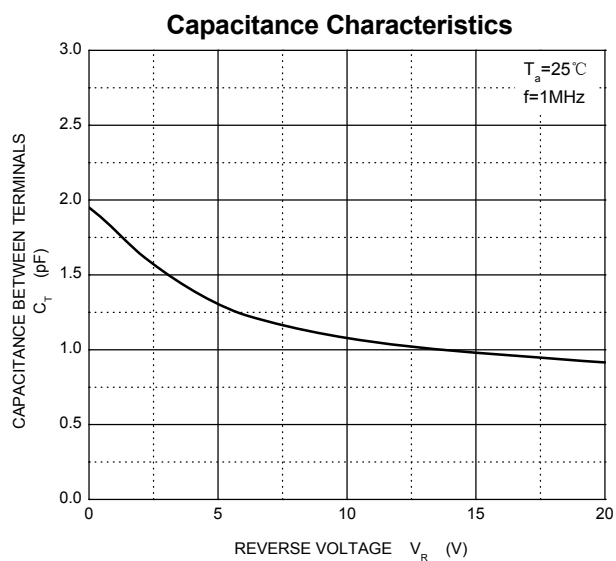
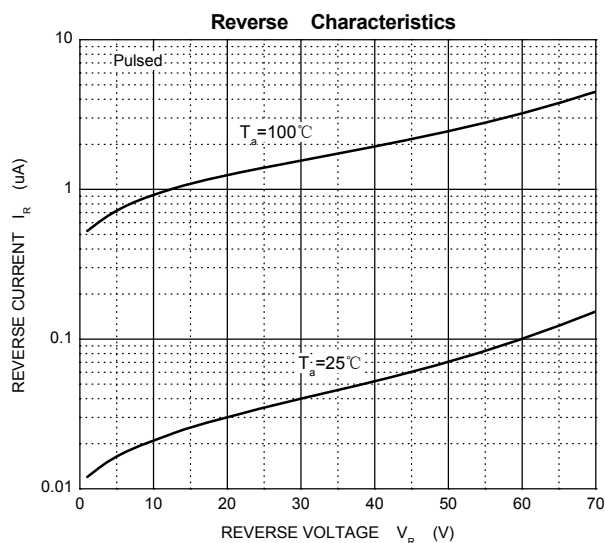
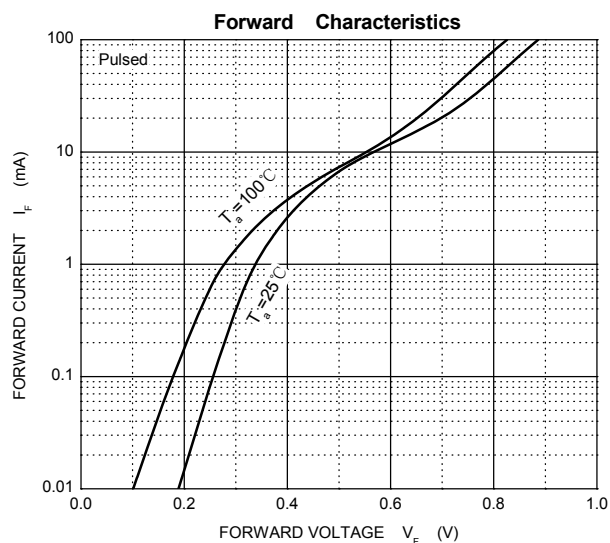
Symbol	Parameter	Value	Unit
V_R	DC Voltage	70	V
I_F	Forward Continuous Current	70	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t = 8.3\text{ms}$	100	mA
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	500	$^\circ\text{C/W}$
T_J	Junction Temperature	125	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 10\mu\text{A}$	70		V
Reverse voltage leakage current	I_R	$V_R = 50\text{V}$		100	nA
Forward voltage	V_F	$I_F = 1\text{mA}$ $I_F = 15\text{mA}$		410 1000	mV
Diode capacitance	C_D	$V_R = 0\text{V}$ $f = 1\text{MHz}$		2	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 10\text{mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100\Omega$		5	ns

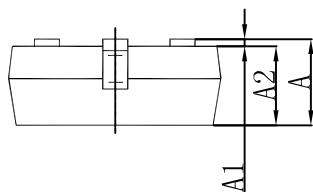
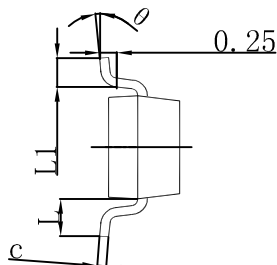
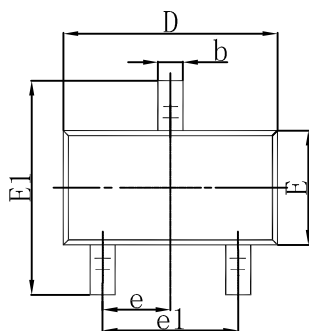


Typical Characteristics



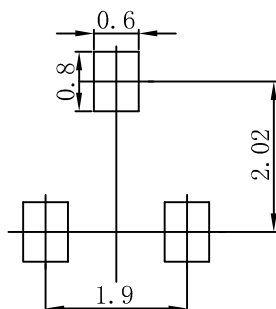


SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	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
c	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
e	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: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.



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