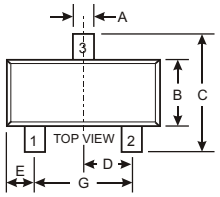
HAICHUANG SEMI

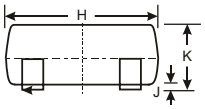
BAS16

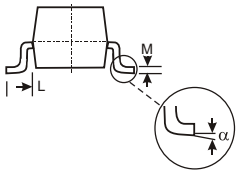
HIGH SPEED SWITCHING DIODES

Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Marking Code:A6





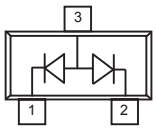


SOT-23		
Dim	**Min**	**Max**
A	0.37	0.51
B	1.20	1.40
C	2.30	2.50
D	0.89	1.03
E	0.45	0.60
G	1.78	2.05
H	2.80	3.00
J	0.013	0.10
K	0.903	1.10
L	0.45	0.61
M	0.085	0.180
α	0°	8°
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
DC Blocking Voltage	V_R	75	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	225	mW
Thermal Resistance	$R_{\theta JA}$	556	℃/W
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{STG}	-55~+150	℃

Equivalent Circuit

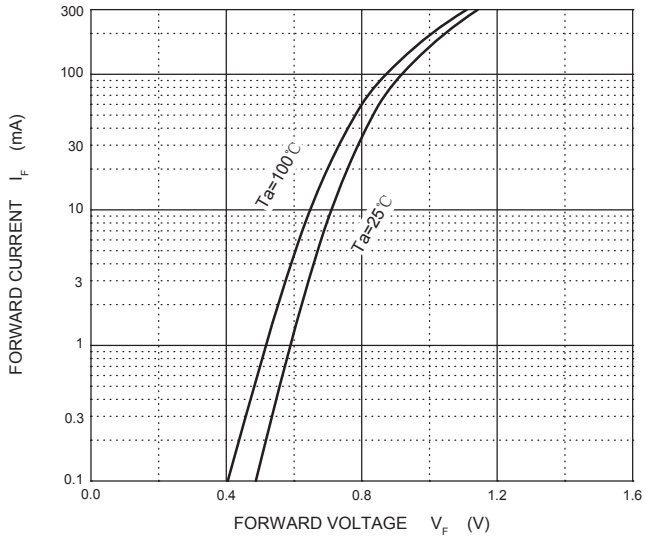


Electrical Characteristics @ T_A = 25°C unless otherwise specified

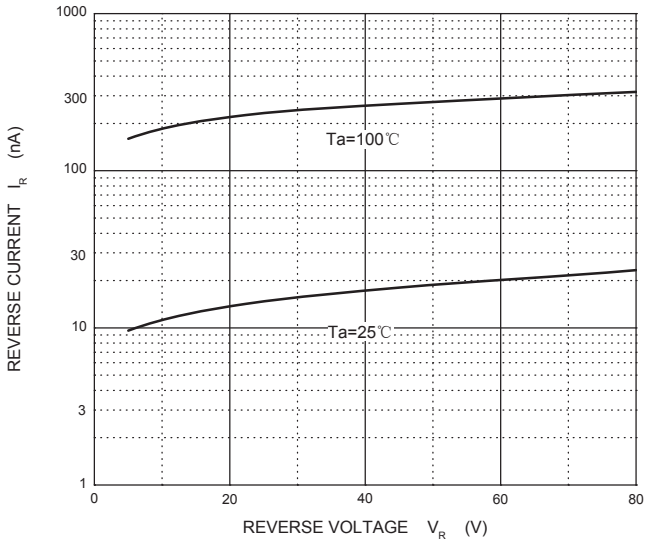
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 100μA	75		V
Reverse voltage leakage current	I_R	V_R=75V		1	μA
Forward voltage	V_F	I_F=1mA I_F=10mA I_F=50mA I_F=150mA		0.715 0.855 1 1.25	V
Diode capacitance	C_D	V_R=0, f=1MHz		2	pF
Reveres recovery time	t_{rr}	I_F=I_R=10mA,I_{rr}=0.1×I_R, R_L=100Ω		6	ns

TYPICAL TRANSIENT CHARACTERISTICS

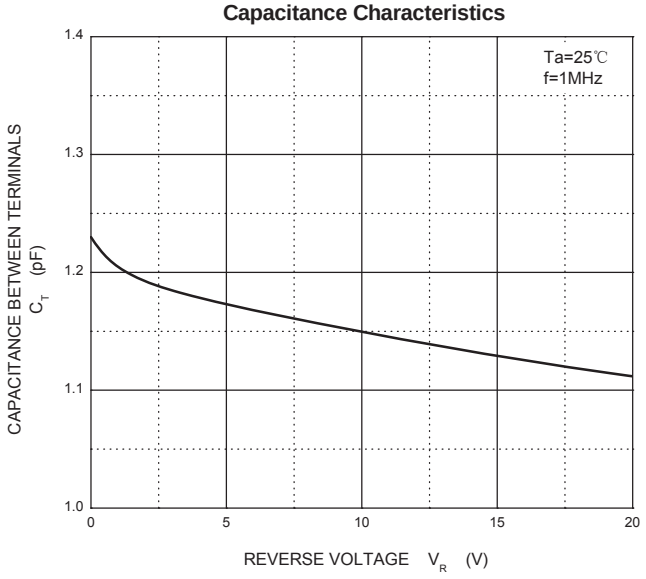
Forward Characteristics



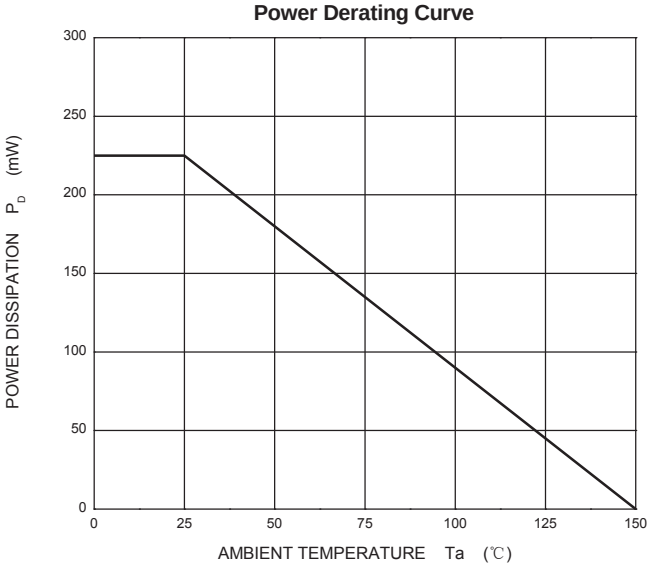
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve



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