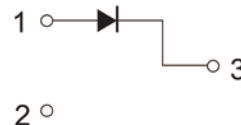


Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



SOT23



Equivalent Circuit

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM}	Peak Repetitive Peak Reverse Voltage	75	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_{FM}	Forward Continuous Current	300	mA
I_o	Average Rectified Output Current	150	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2.0	A
P_d	Power Dissipation	225	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	556	$^{\circ}\text{C}/\text{W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

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

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

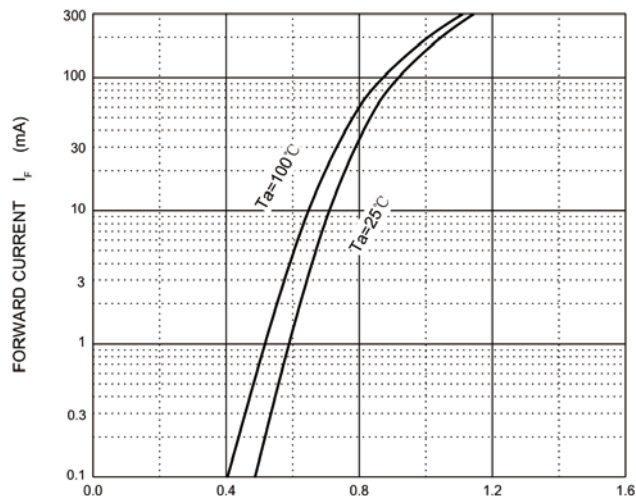
Ordering information

Product ID	Marking	Naming rule	Pack	Qty(PCS)
BAS16	A6	BAS16 ↓ 产品名称 product name	SOT23	3000

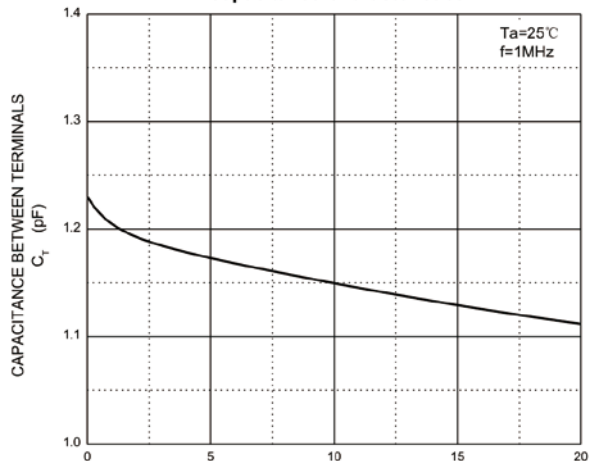


Typical Characteristics

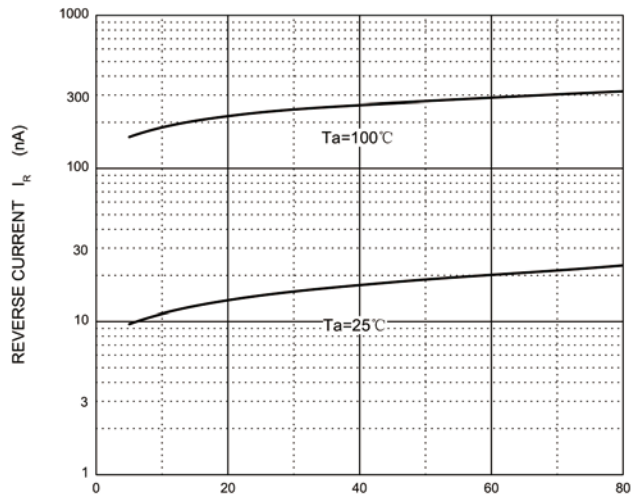
Forward Characteristics

FORWARD VOLTAGE V_F (V)

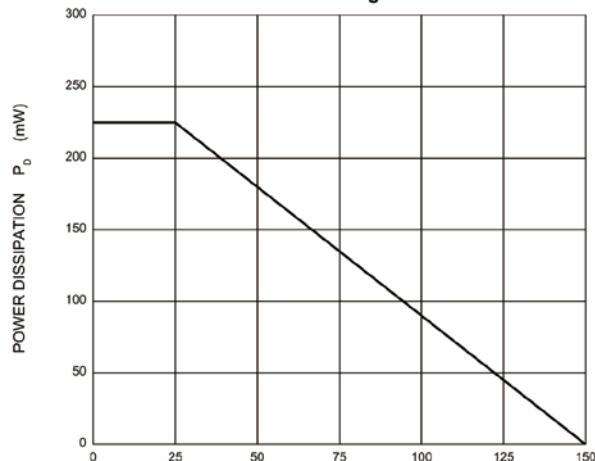
Capacitance Characteristics

REVERSE VOLTAGE V_R (V)

Reverse Characteristics

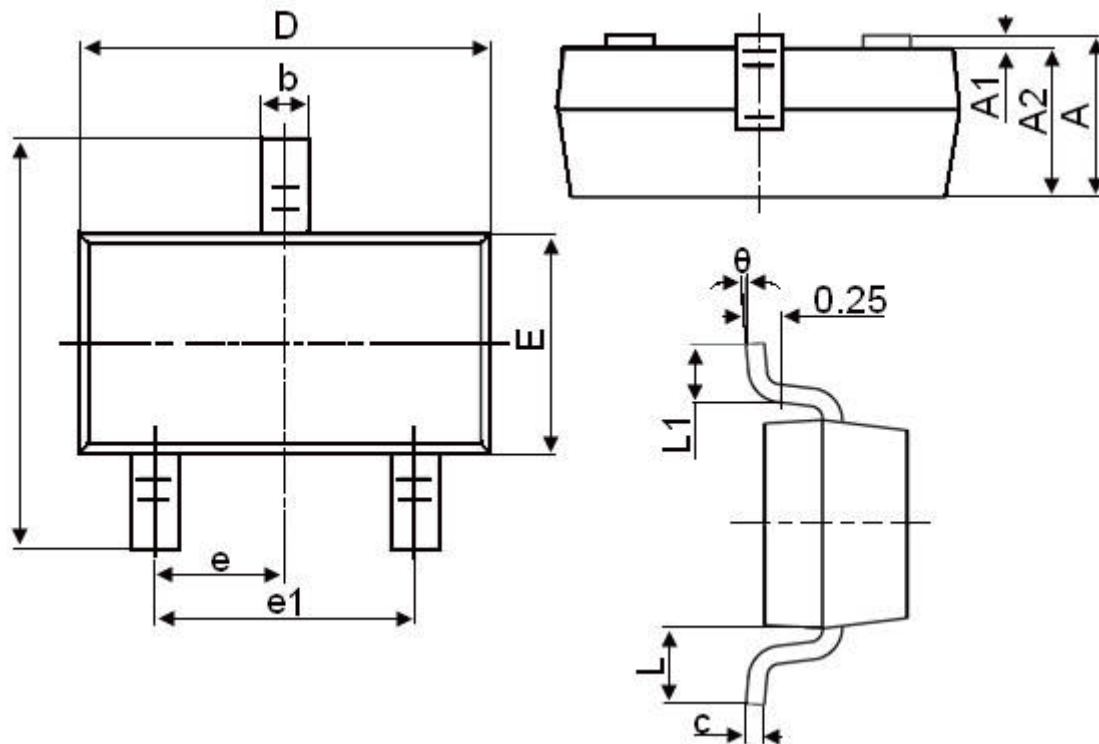
REVERSE VOLTAGE V_R (V)

Power Derating Curve

AMBIENT TEMPERATURE T_a ($^\circ\text{C}$)



SOT23 Package Outline Dimensions



Symbol	Dimensions in Millimeters	
	mm	
	Min	Max
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°