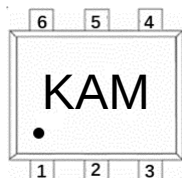


Features

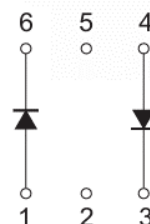
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



Marking and pin assignment



SOT-563 top view



Schematic diagram



Halogen-Free

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

Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_R	Peak Repetitive Peak Reverse Voltage	75	V
V_{RRM}	Working Peak Reverse Voltage		
V_{RWM}	DC Blocking Voltage		
I_{FM}	Forward Continuous Current	300	mA
$V_R (RMS)$	RMS Reverse Voltage	53	V
I_O	Average Rectified Output Current	200	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	833	$^{\circ}\text{C/W}$
T_J, T_{STG}	Operating and Storage Temperature Range	-55~ +150	$^{\circ}\text{C}$

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

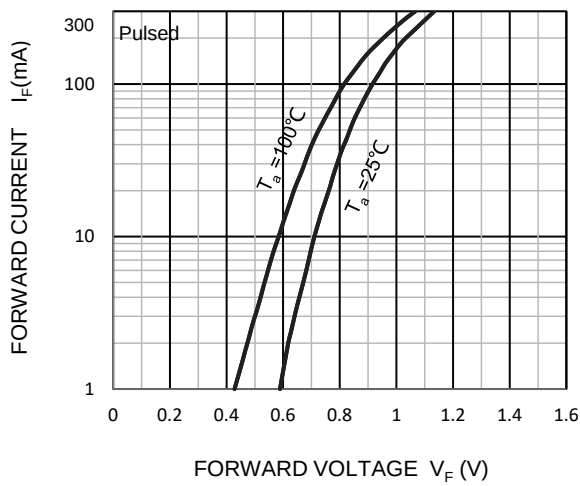
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=100\mu\text{A}$	75	--	--	V
I_{R1}	Reverse current	$V_R=75\text{V}$	--	--	1	μA
I_{R2}		$V_R=20\text{V}$	--	--	25	nA
V_{F1}	Forward voltage	$I_F=1\text{mA}$	--	--	0.715	V
V_{F2}		$I_F=10\text{mA}$	--	--	0.855	V
V_{F3}		$I_F=50\text{mA}$	--	--	1.000	V
V_{F4}		$I_F=150\text{mA}$	--	--	1.250	V
C_T	Capacitance between terminals	$V_R=0, f=1\text{MHz}$	--	--	2	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10\text{mA}, I_r=0.1I_{FR}, R_L=100\Omega$	--	--	4	ns

Ordering Information (Example)

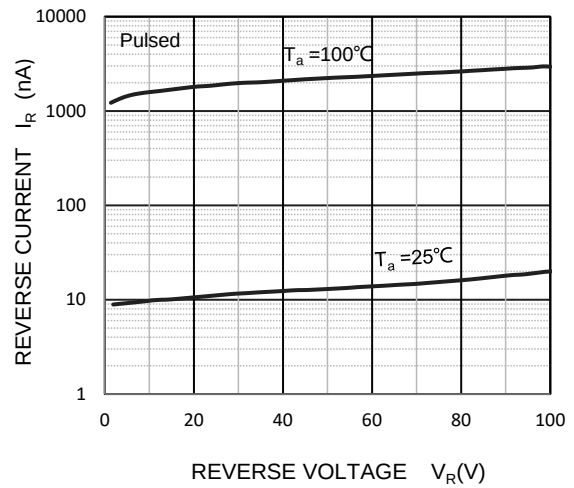
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
BAS16V	SOT-563	KAM	3,000	45,000	180,000	7"reel

Typical Operating Characteristics

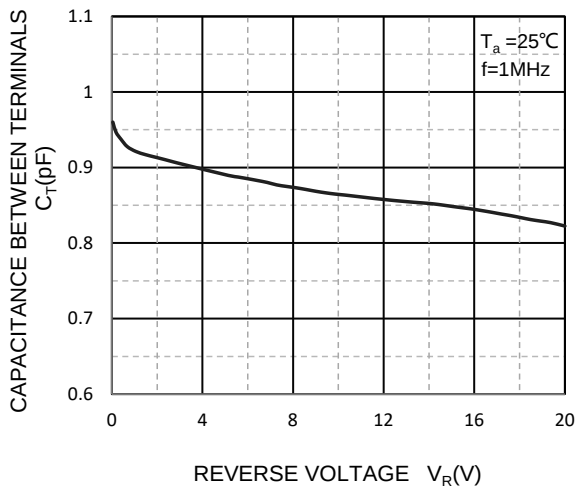
Forward Characteristics



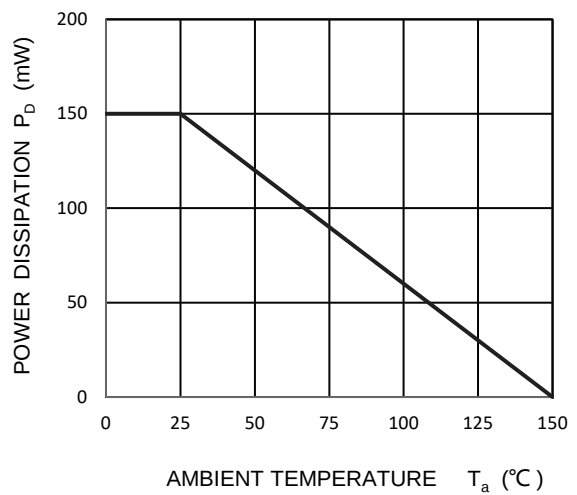
Reverse Characteristics



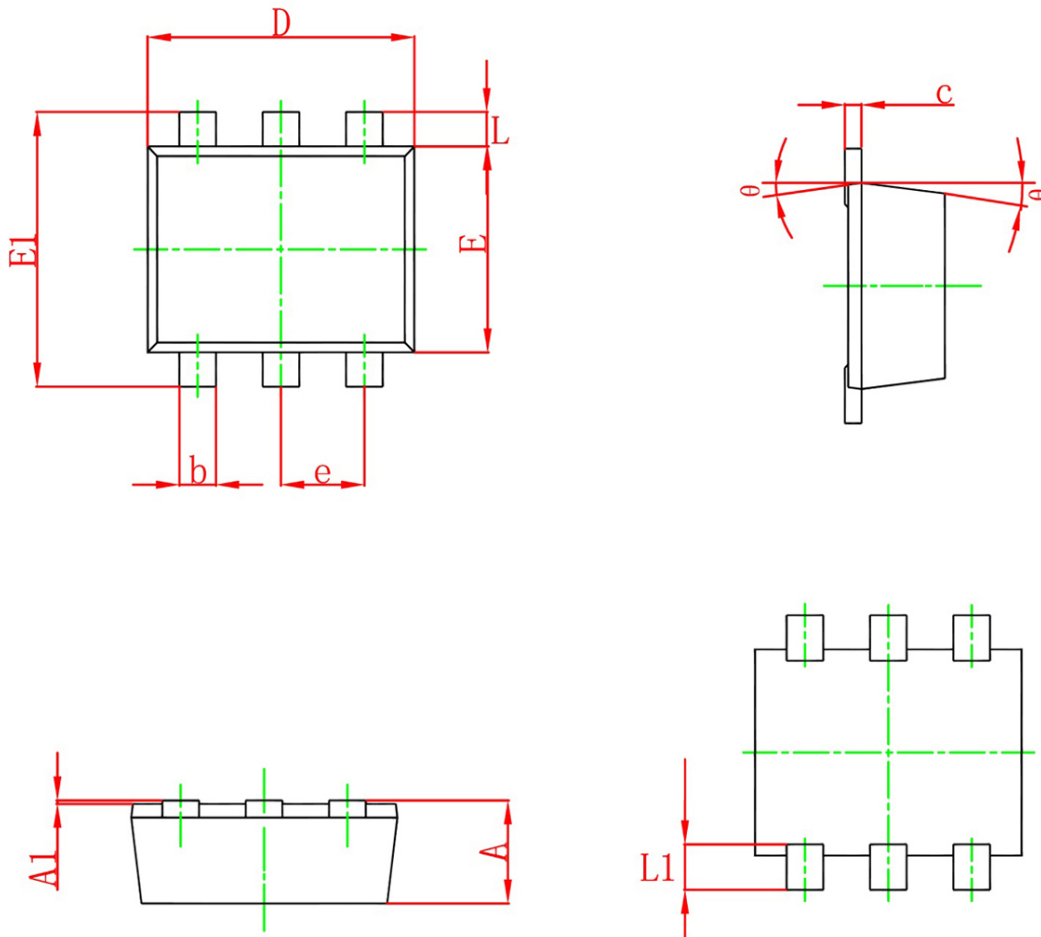
Capacitance Characteristics



Power Derating Curve



SOT-563 Package Outline Dimensions



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.500	0.600	0.020	0.024
A1	0.000	0.050	0.000	0.002
e	0.450	0.550	0.018	0.022
c	0.090	0.180	0.004	0.007
D	1.500	1.700	0.059	0.067
b	0.170	0.270	0.007	0.011
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
L	0.100	0.300	0.004	0.012
L1	0.200	0.400	0.008	0.016
θ	10° REF.		10° REF.	