

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

FEATURES

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

MARKING

.KAM

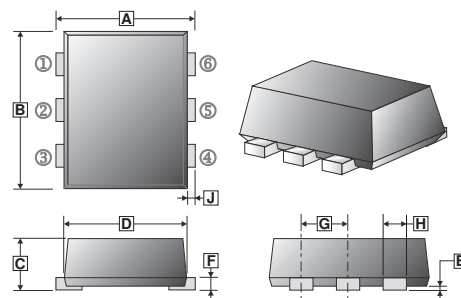
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-563	3K	7 inch

ORDER INFORMATION

Part Number	Type
BAS16V-C	Lead (Pb)-free and Halogen-free

SOT-563



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.50	1.70	F	0.09	0.16
B	1.50	1.70	G	0.45	0.55
C	0.525	0.60	H	0.17	0.27
D	1.10	1.30	J	0.10	0.30
E	-	0.05			

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

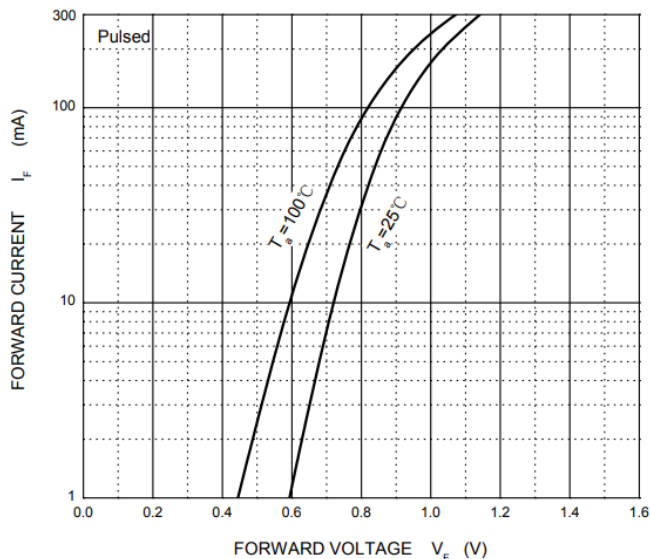
Parameter	Symbol	Ratings	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}	75	V
Maximum DC Blocking Voltage	V _R	75	V
RMS Reverse Voltage	V _{R(RMS)}	53	V
Peak Forward Continuous Current	I _{FM}	300	mA
Maximum Average Forward Rectified Current	I _{F(AV)}	200	mA
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	2	A
Power Dissipation	P _D	150	mW
Thermal Resistance Junction-Ambient	R _{θJA}	833	°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

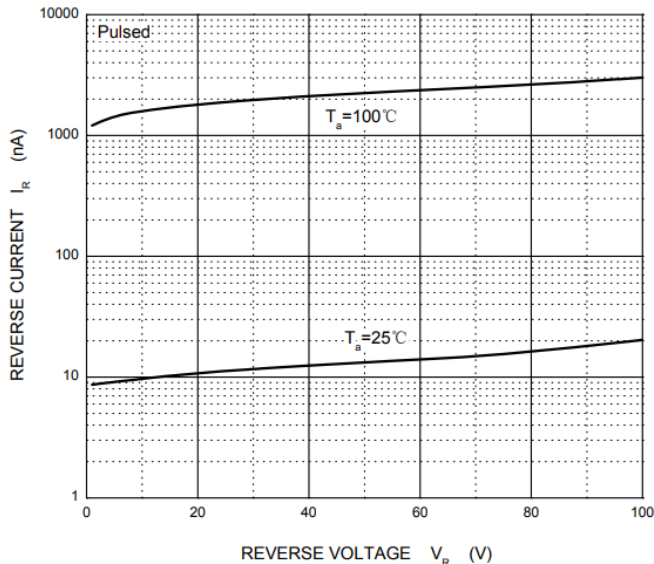
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	V _(BR)	75	-	-	V	I _R =100μA
Forward Voltage	V _{F1}	-	-	0.715	V	I _F =1mA
	V _{F2}	-	-	0.855		I _F =10mA
	V _{F3}	-	-	1		I _F =50mA
	V _{F4}	-	-	1.25		I _F =150mA
Reverse Voltage Leakage Current	I _{R1}	-	-	1	μA	V _R =75V
	I _{R2}	-	-	0.025		V _R =20V
Diode Capacitance	C _D	-	2	-	pF	V _R =0, f=1MHz
Reverse Recovery Time	T _{RR}	-	4	-	nS	I _F =I _R =10mA, I _{RR} =0.1xI _R , R _L =100Ω

RATINGS AND CHARACTERISTIC CURVES

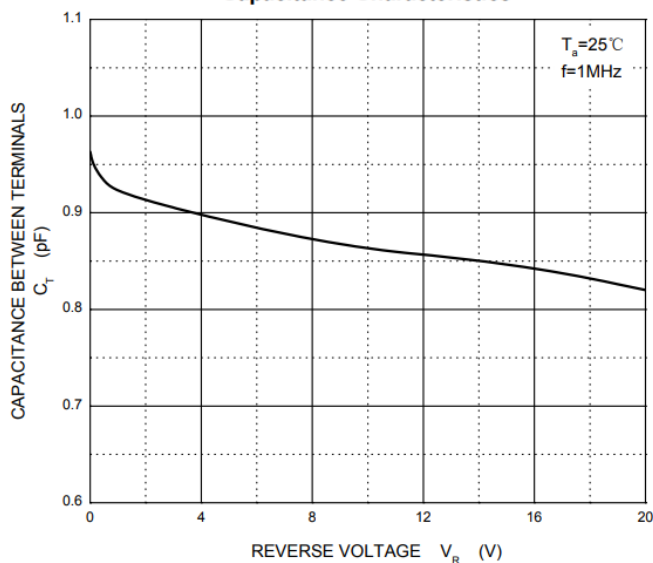
Forward Characteristics



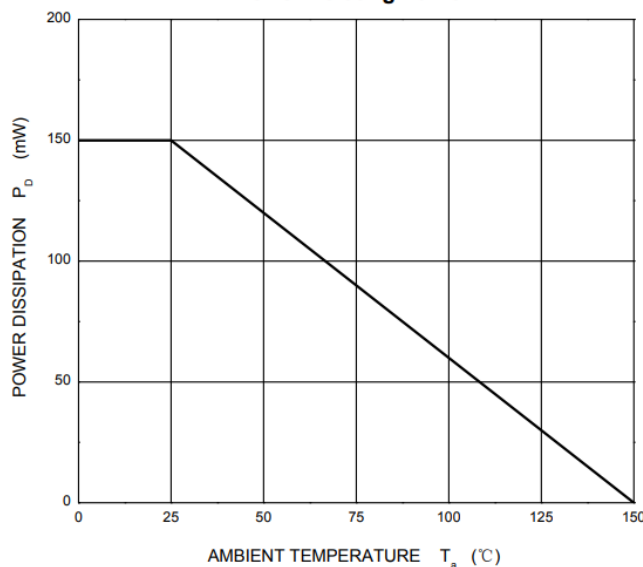
Reverse Characteristics



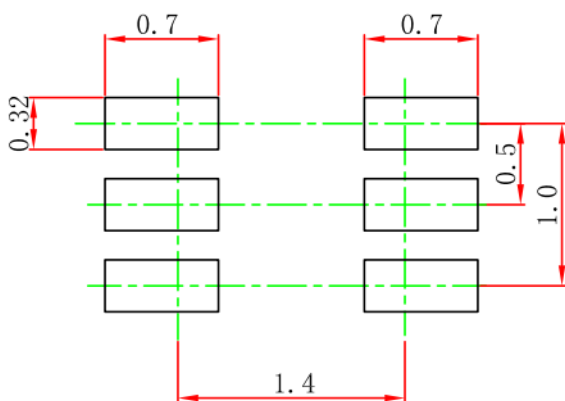
Capacitance Characteristics



Power Derating Curve



Mounting Pad Layout



*Dimensions in millimeters