Elektronische Bauelemente

BAS16V

0.3A , 100V

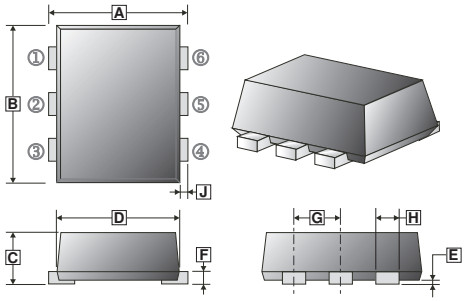
Plastic-Encapsulated Transistors

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Fast switching speed
- For General Purpose Switching Applications
- High Conductance

SOT-563



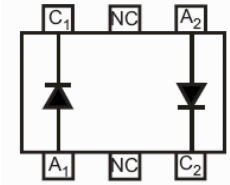
MARKING

KAM

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-563	3K	7 inch

REF.	Millimeter Min.	Millimeter Max.	REF.	Millimeter Min.	Millimeter 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℃ unless otherwise specified)

Parameter		Symbol	Value	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 8.3 ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	t=1.0μs	I_{FSM}	2.0	A
	t=1.0s		1.0	
Power dissipation		P_D	150	mW
Thermal Resistance Junction to Ambient		$R_{\theta JA}$	833	K / W
Operating Junction and storage temperature range		T_J,T_{STG}	150,-65~150	℃

ELECTRICAL CHARACTERISTICS (T_A = 25℃ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	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	-	-	2.0	pF	V_R=0 , f=1MHz
Reverse Recovery Time	T_{RR}	-	-	4.0	nS	I_F=I_R=10mA, I_{RR}=0.1 x I_R, R_L=100Ω

RATINGS AND CHARACTERISTIC CURVES

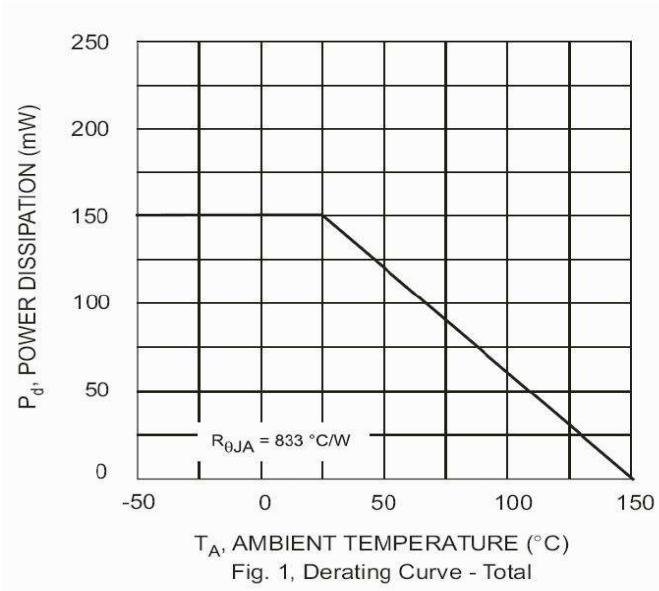


Fig. 1, Derating Curve - Total

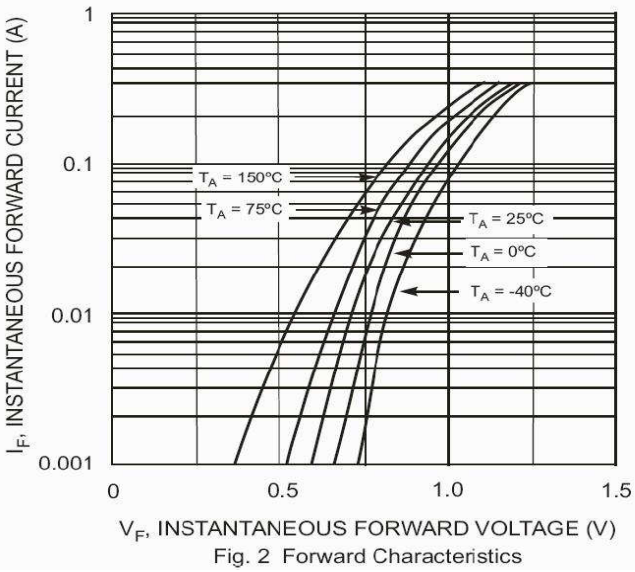


Fig. 2 Forward Characteristics

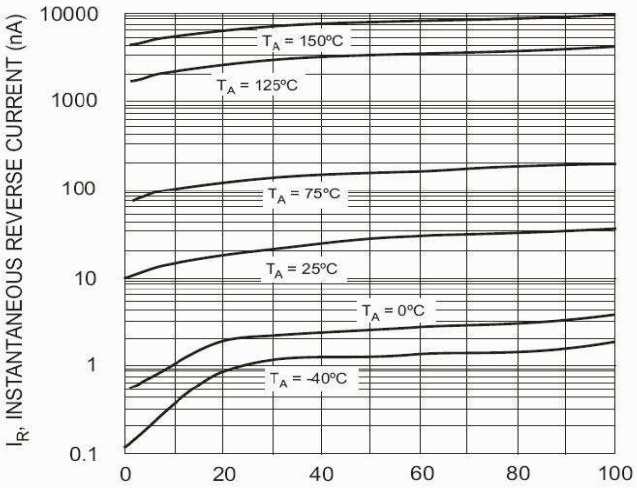


Fig. 3 Typical Reverse Characteristics

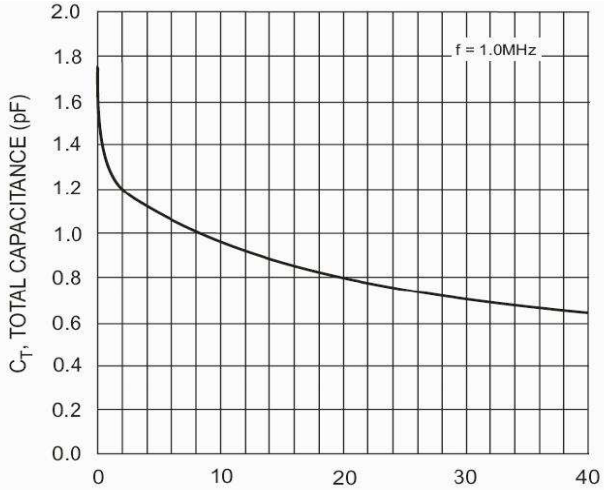


Fig. 4 Typical Capacitance vs. Reverse Voltage