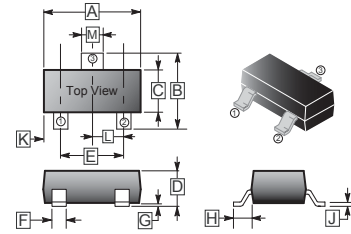


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

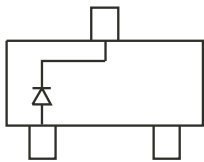
SOT-523

FEATURES

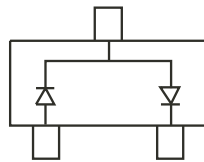
- Low Turn-on voltage
- Fast switching



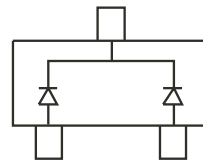
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.5	1.7	G	-	0.1
B	1.45	1.75	H	0.55 REF.	
C	0.75	0.85	J	0.1	0.2
D	0.7	0.9	K	-	
E	0.9	1.1	L	0.5 TYP.	
F	0.15	0.25	M	0.25	0.325



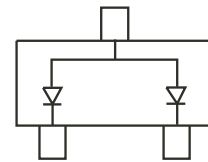
BAS40T Marking: 43



BAS40-04T Marking: 44



BAS40-05T Marking: 45



BAS40-06T Marking: 46

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.

TYPE NUMBER	SYMBOL	VALUES	UNITS
Peak Repetitive Peak reverse voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current	I_{FM}	200	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0s	I_{FSM}	0.6	A
Average Rectified Output Current	I_O	200	mA
Power Dissipation	P_D	150	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	833	°C/W
Operating Junction Temperature (Max.)	T_J	125	°C
Storage temperature	T_{STG}	-65~125	°C

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.

PARAMETERS	SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 10\mu A$	40		V
Forward voltage	V_F	$I_F = 1mA$ $I_F = 40mA$		380 1000	mV
Reverse voltage leakage current	I_R	$V_R = 30V$		0.2	μA
Diode capacitance	C_D	$V_R = 0, f = 1MHz$		5	pF
Reveres recovery time	t_{rr}	$I_F = I_R = 10mA, I_{rr} = 0.1I_R,$ $R_L = 100\Omega$		5	nS

RATINGS AND CHARACTERISTIC CURVES

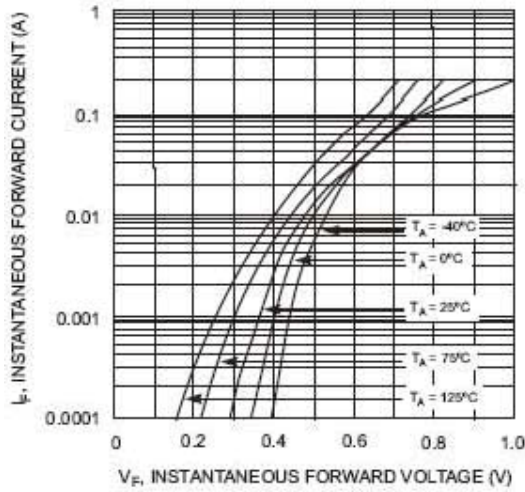


Fig. 1 Typical Forward Voltage

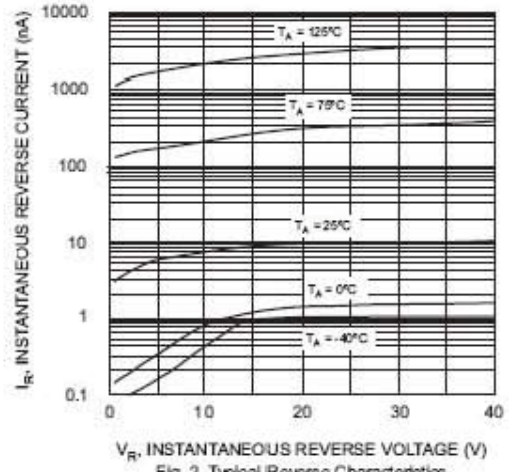


Fig. 2 Typical Reverse Characteristics

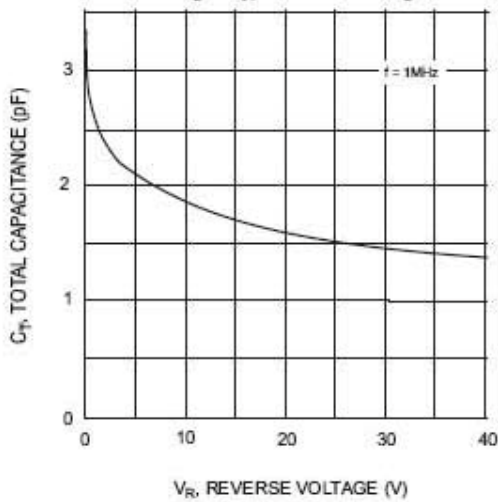


Fig. 3 Typical Capacitance

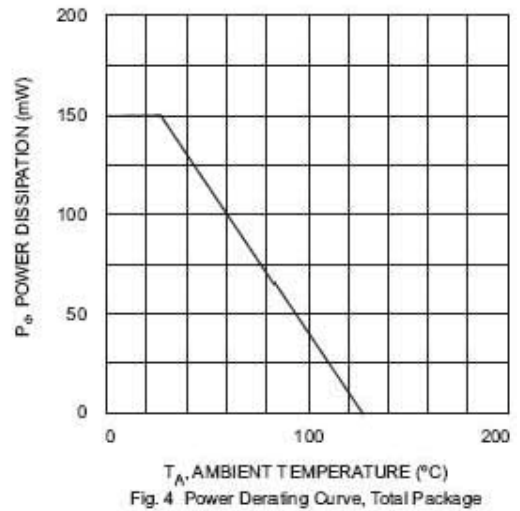


Fig. 4 Power Derating Curve, Total Package