Elektronische Bauelemente

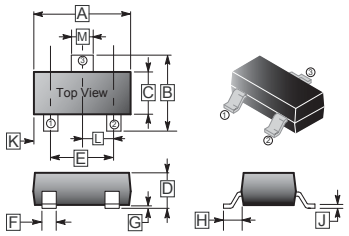
BAS40T/BAS40-04T/ BAS40-05T/BAS40-06T

VOLTAGE 40 V, 200 mA

Surface Mount Schottky Barrier Rectifiers

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

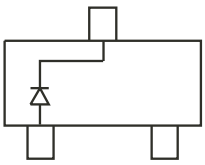
SOT-523



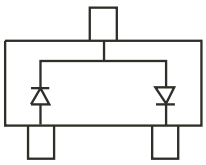
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.5	1.7	G	-	0.1
B	1.45	1.75	H	0.55 REF.	
C	0.75	0.85	J	0.1	0.2
D	0.7	0.9	K	-	
E	0.9	1.1	L	0.5 TYP.	
F	0.15	0.25	M	0.25	0.325

FEATURES

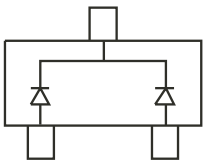
- Low Turn-on voltage
- Fast switching



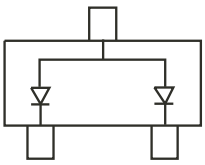
BAS40T Marking: 43



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 Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	V
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	℃/W
Operating Junction Temperature (Max.)	T_J	125	℃
Storage temperature	T_{STG}	-65~125	℃

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= 10μA	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}=0.1xI_R, R_L=100Ω		5	nS

RATINGS AND CHARACTERISTIC CURVES

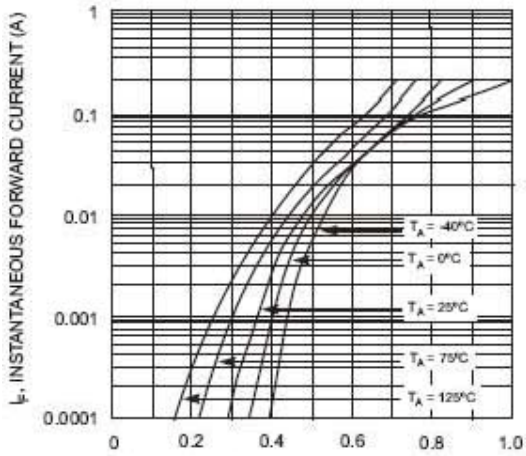


Fig. 1 Typical Forward Voltage

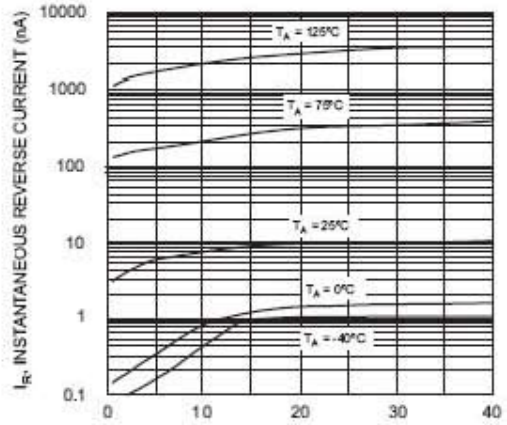


Fig. 2 Typical Reverse Characteristics

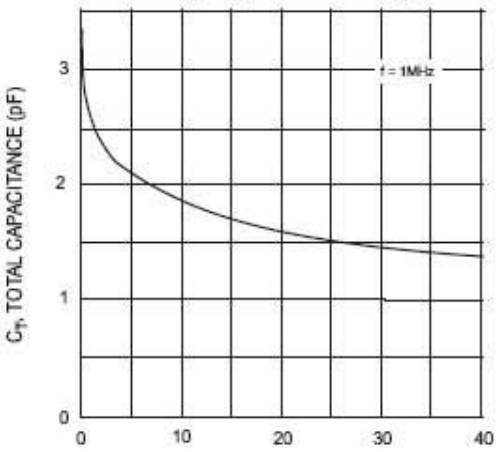


Fig. 3 Typical Capacitance

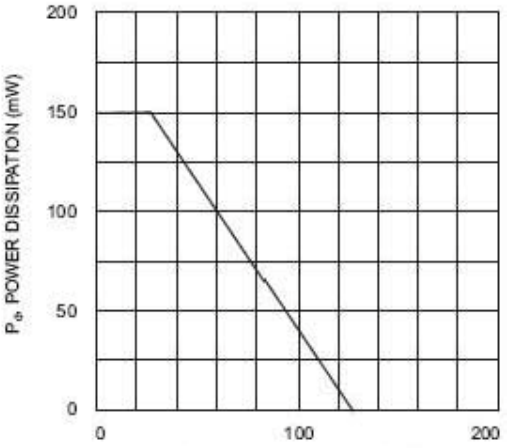


Fig. 4 Power Derating Curve, Total Package