



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-523 Plastic-Encapsulate Diodes

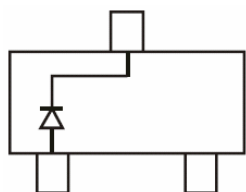
BAS40T/-04T/-05T/-06T SCHOTTKY DIODE

SOT-523

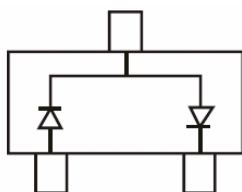


FEATURES

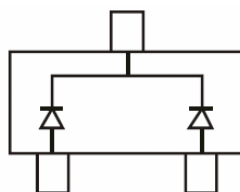
- Low forward voltage
- Fast switching



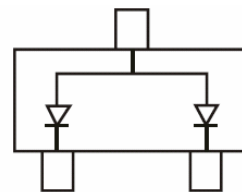
BAS40T MARKING: 43



BAS40-04T MARKING: 44



BAS40-05T MARKING: 45



BAS40-06T MARKING: 46

Maximum Ratings @T_A=25°C

Parameter	Symbol	Limits	Unit
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
Average Rectified Output Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0s	I_{FSM}	0.6	A
Power Dissipation	P_D	150	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	833	°C/W
Operating Junction Temperature	T_J	125	°C
Storage temperature	T_{STG}	-65-125	°C

Electrical Characteristics @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	40			V	$I_R=10\mu A$
Forward voltage	V_{F1}			0.38	V	$I_F=1mA$
	V_{F2}			1	V	$I_F=40mA$
Reverse current	I_R			0.2	μA	$V_R=30V$
Diode Capacitance	C_D			5	pF	$V_R=0, f=1MHz$
Reverse Recovery Time	t_{rr}			5	nS	$I_F=I_R=10mA$ $I_{rr}=0.1X I_R, R_L=100\Omega$

Typical Characteristics

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

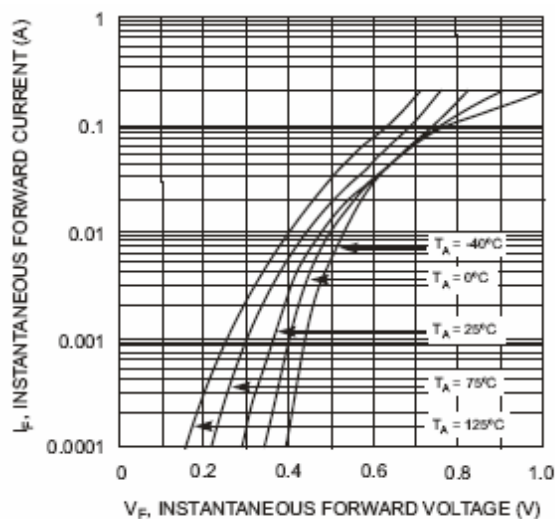


Fig. 1 Typical Forward Voltage

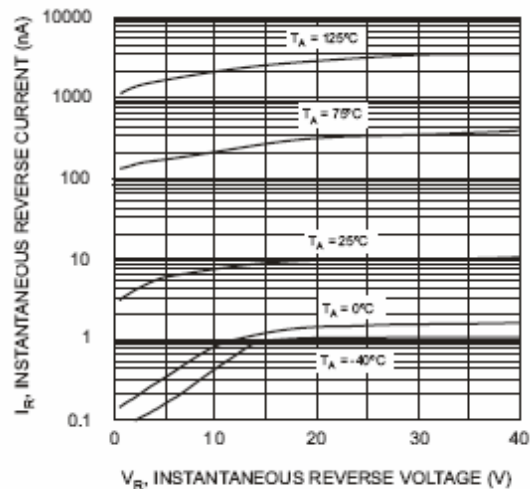


Fig. 2 Typical Reverse Characteristics

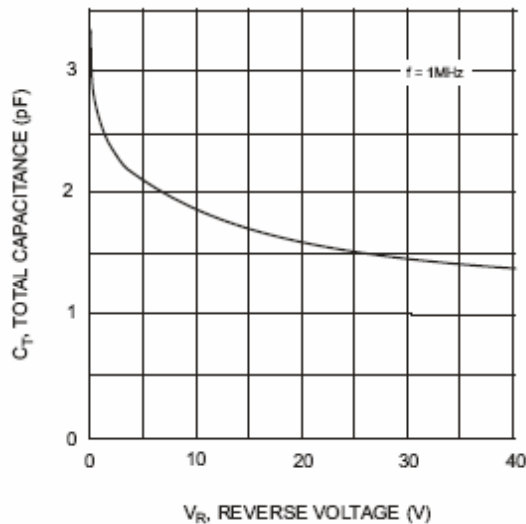


Fig. 3 Typical Capacitance

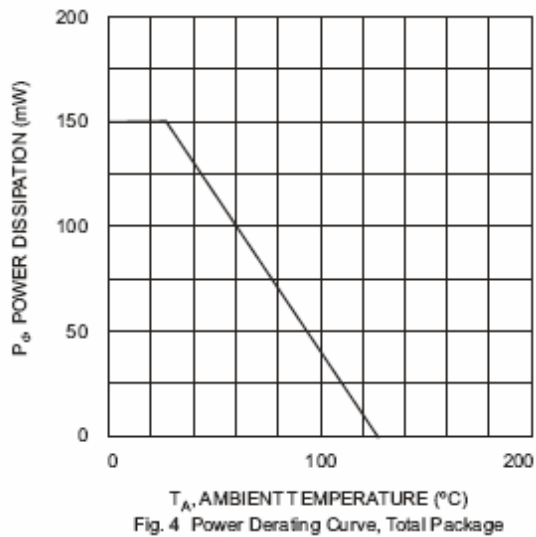


Fig. 4 Power Derating Curve, Total Package