



KI SEMICONDUCTOR CO.

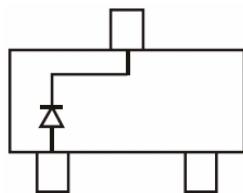
SOT-323 Plastic-Encapsulate Diodes

BAS40W series

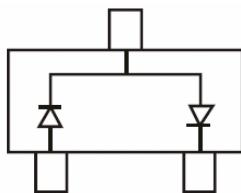
SCHOTTKY DIODE

FEATURES

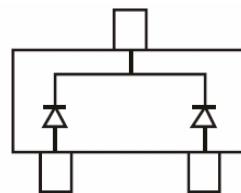
- Low forward voltage
- Fast switching



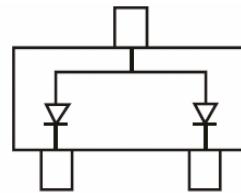
BAS40W MARKING: 43h



BAS40W-04 MARKING: 44



BAS40W-05 MARKING: 45



BAS40W-06 MARKING: 46

Maximum Ratings @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Limits			Unit
Peak Repetitive Peak reverse voltage	V_{RRM}				
Working Peak Reverse Voltage	V_{RWM}	40			V
DC Blocking Voltage	V_R				
Forward Continuous Current	I_{FM}	200			mA
Power Dissipation	P_d	200			mW
Storage temperature	T_{STG}	-55-150			°C

Electrical Characteristics@ $T_A=25^\circ\text{C}$

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

Typical Characteristics

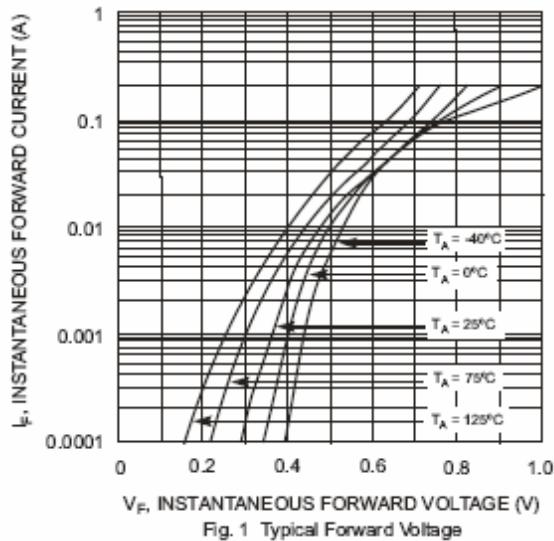


Fig. 1 Typical Forward Characteristics

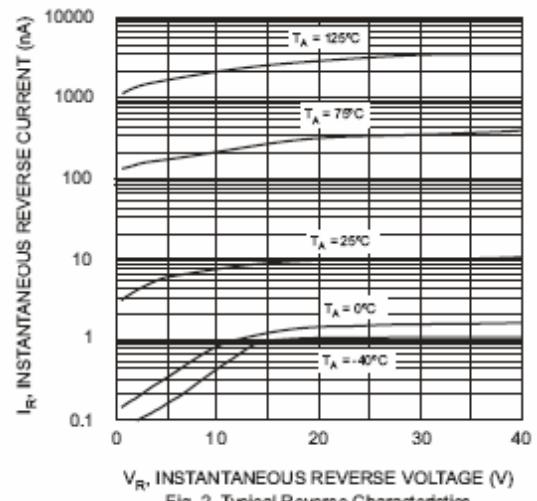


Fig. 2 Typical Reverse Characteristics

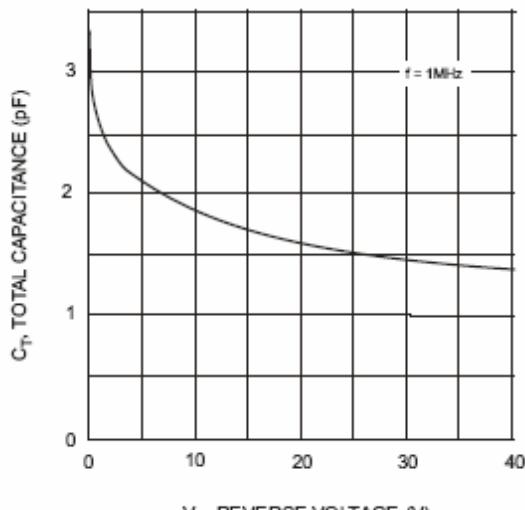


Fig. 3 Typical Capacitance

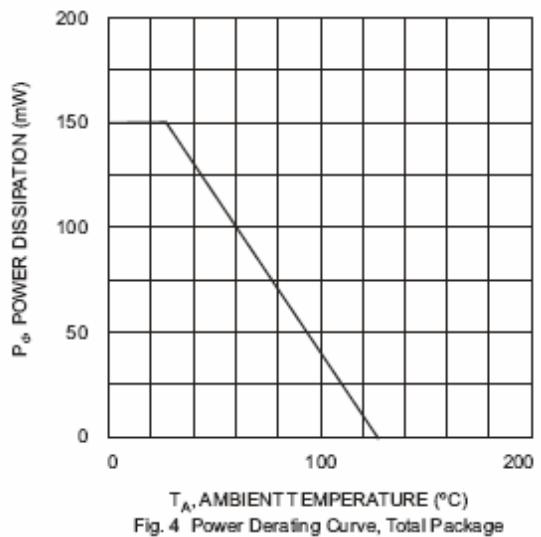


Fig. 4 Power Derating Curve, Total Package