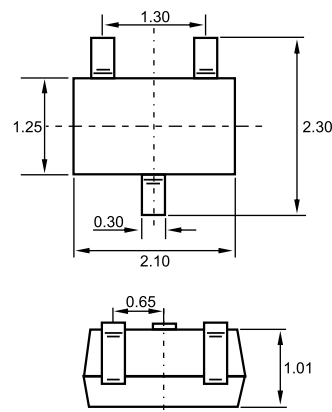
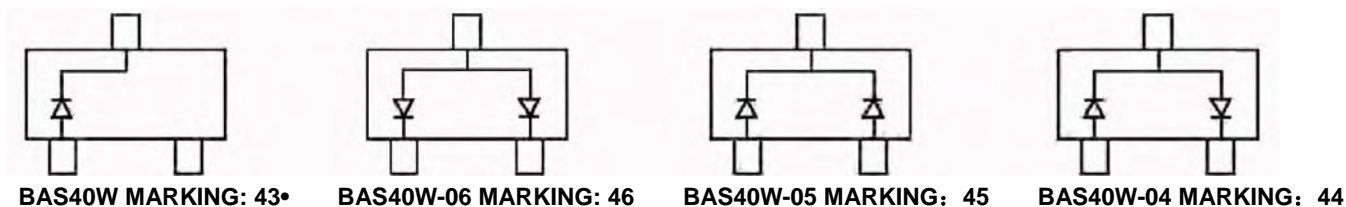


**SOT-323**


Dimensions in inches and (millimeters)

**Features**

- ◇ Low Forward Voltage
- ◇ Fast Switching


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

Parameter	Symbol	Limits	Unit
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
Power Dissipation	$P_D$	150	mW
Thermal Resistance. Junction to Ambient Air	$R_{\theta JA}$	833	$^{\circ}\text{C}/\text{W}$
Junction temperature	$T_J$	125	$^{\circ}\text{C}$
Storage temperature range	$T_{STG}$	-65-125	$^{\circ}\text{C}$

**ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}\text{C}$  unless otherwise specified)**

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=10\mu\text{A}$	40		V
Reverse voltage leakage current	$I_R$	$V_R=30\text{V}$		200	nA
Forward voltage	$V_F$	$I_F=1\text{mA}$ $I_F=40\text{mA}$		380 1000	mV
Diode capacitance	$C_D$	$V_R=0, f=1\text{MHz}$		5	pF
Reverse Recovery time	$t_{rr}$	$I_{rr}=1\text{mA}, I_R=I_F=10\text{mA}$ $R_L=100\Omega$		5	nS

## Typical Characteristics

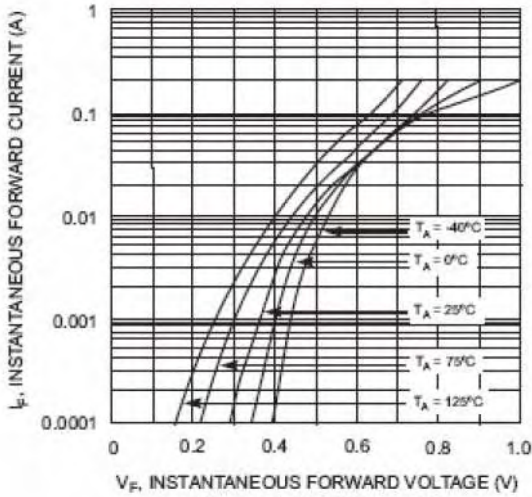


Fig. 1 Typical Forward Voltage

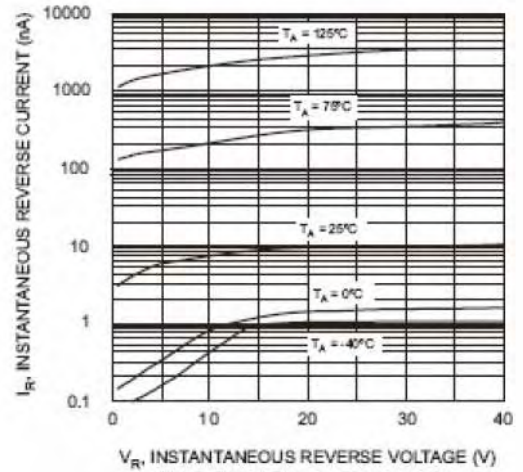


Fig. 2 Typical Reverse Characteristics

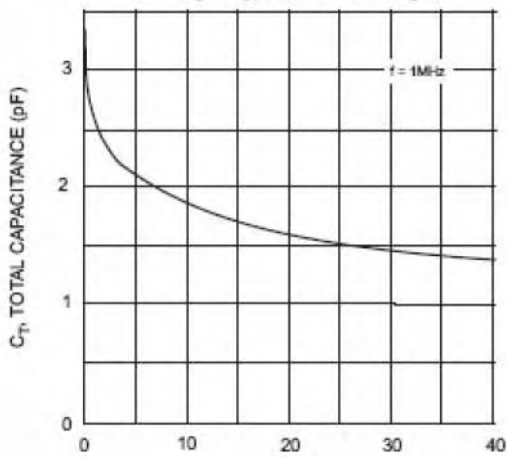


Fig. 3 Typical Capacitance

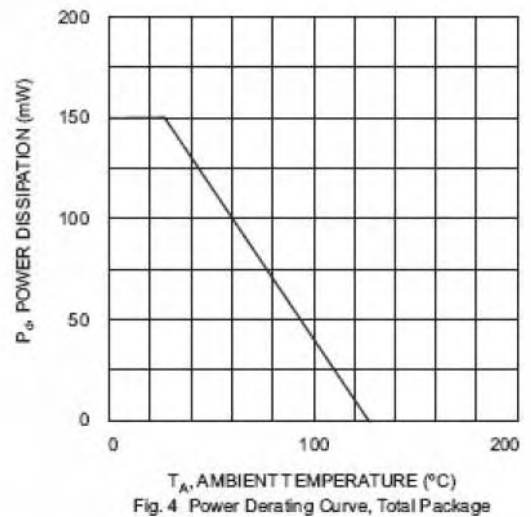


Fig. 4 Power Derating Curve, Total Package