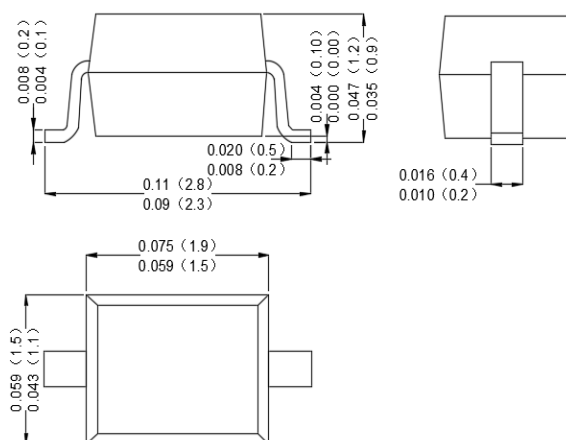




### Features

- Low forward voltage
- Small plastic SMD SOD-323 package

### SOD-323



### Mechanical Data

- Case:Molded Plastic,SOD-323
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026
- Mounting Position : Any.
- Marking:S1

Dimensions in inches and (millimeters)

### Maximum Ratings Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V
Forward Current	$I_F$	350	mA
Peak Forward Surge Current ( $t_p = 10$ ms)	$I_{FSM}$	2	A
Thermal Resistance from Junction Ambient	$R_{thJA}$	550	°C/W
Maximum Operating Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	- 65 to + 150	°C

### Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 25$ $\mu$ A	$V_{(BR)R}$	40	-	V
Forward Voltage at $I_F = 0.1$ mA at $I_F = 1$ mA at $I_F = 10$ mA at $I_F = 50$ mA at $I_F = 200$ mA at $I_F = 500$ mA	$V_F$	- - - - - -	0.25 0.3 0.4 0.5 0.75 0.9	V
Reverse Current at $V_R = 1.5$ V at $V_R = 10$ V at $V_R = 20$ V at $V_R = 40$ V	$I_R$	- - - -	1 2 5 25	$\mu$ A



### Rating And Characteristic Curves

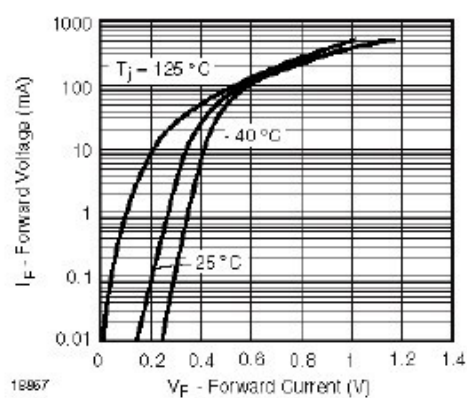


Figure 1. Typical Forward Voltage Forward Current at Various Temperatures

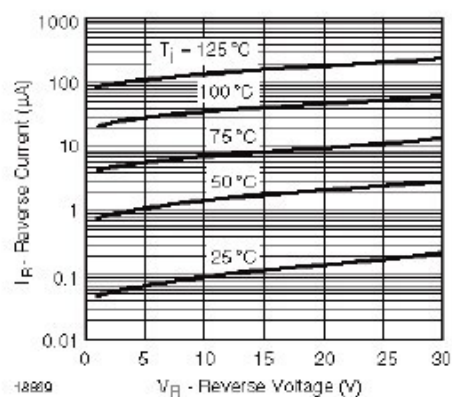


Figure 3. Typical Variation of Reverse Current at Various Temperatures

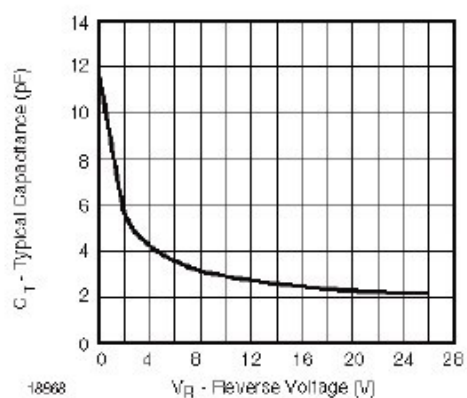


Figure 2. Typical Capacitance  $C_T$  vs. Reverse Applied Voltage  $V_R$



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