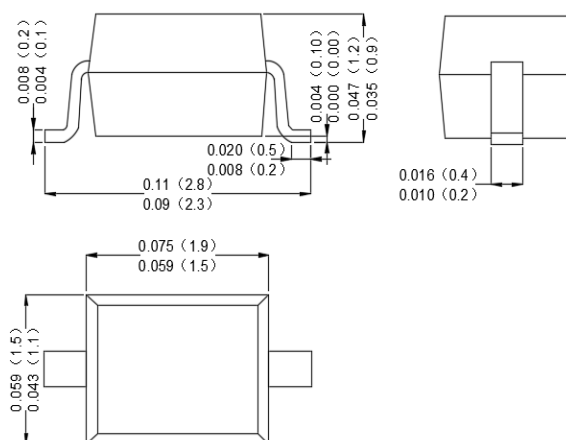




Features

- Ultra high-speed switching
- Very low forward voltage
- Very small SMD plastic 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: FP

Dimensions in inches and (millimeters)

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

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	20	V
Continuous Forward Current	I_F	1	A
Non-repetitive Peak Forward Current (t = 8.3 ms Half Sine Wave, JEDEC method)	I_{FSM}	5	A
Junction Temperature	T_J	125	°C
Operating Ambient Temperature Range	T_{op}	- 65 to + 125	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	220 ¹⁾ 180 ²⁾	°C/W

¹⁾ Mounted on P.C.B. 10 X 10 mm² Cu

²⁾ Mounted on P.C.B. 40 X 40 mm² Cu

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10$ mA at $I_F = 100$ mA at $I_F = 1$ A	V_F	0.27 0.35 0.65	V
Reverse Current at $V_R = 5$ V at $V_R = 8$ V at $V_R = 15$ V	I_R	10 20 50	μA
Diode Capacitance at $V_R = 5$ V, f = 1 MHz	C_d	25	pF



Rating And Characteristic Curves

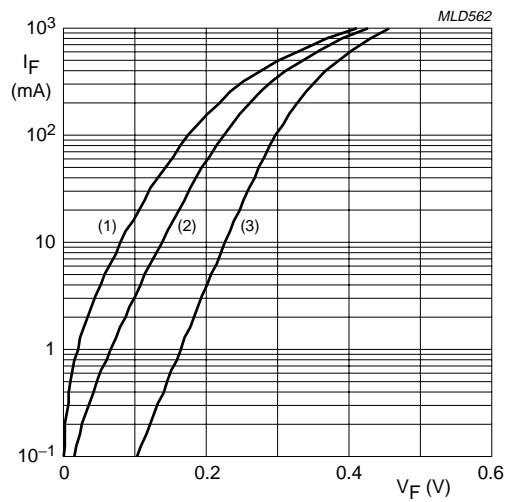


Fig.1 Forward current as a function of forward voltage; typical values.

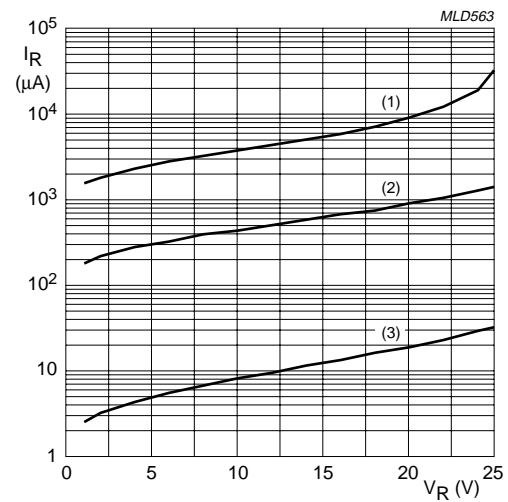


Fig.2 Reverse current as a function of reverse voltage; typical values.

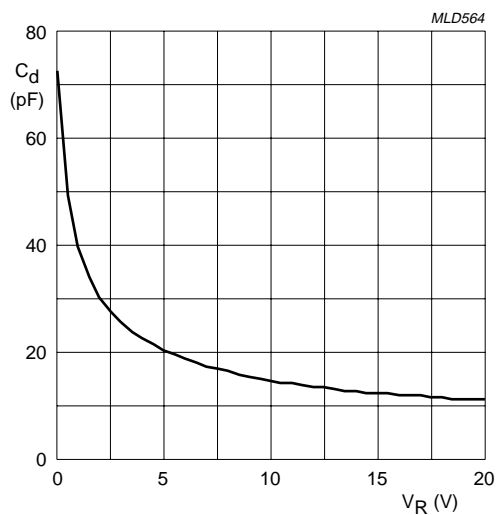


Fig.3 Diode capacitance as a function of reverse voltage; typical values.



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