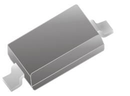
SMD Switching Diode

Comchip
SMD Diode Specialist

CDSV16-G

RoHS Device



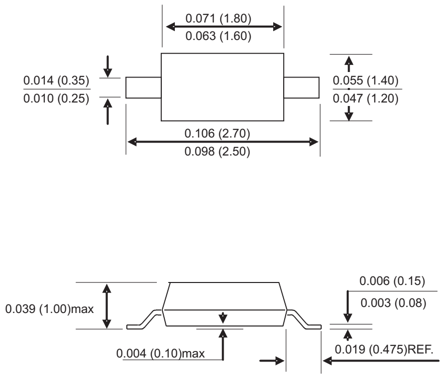
Features

- -Fast Switching Speed
- -Electrically Identical to Standard JEDEC
- -High Conductance
- -Surface Mount Package Ideally Suited for Automatic Insertion
- -Flat Package SOD-123 in Stead mini-MELF Package

Mechanical data

- -Case: SOD-323, Molded Plastic
- -Terminals: Solderable per MIL-STD-202, Method 208
- -Weight: 0.01 gram(approx.)

SOD-323



Dimensions in inches and (millimeters)

Maximum Rating (at Ta=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Max	Unit
Non-Repetitive peak reverse voltage		V_{RM}		100	V
Peak repetitive peak reverse voltage **Working peak reverse voltage** **DC blocking voltage**		V_{RRM} V_{RWM} V_R		75	V
RMS reverse voltage		$V_{R(RMS)}$		53	V
Forward continuous current		I_{FM}		300	mA
Average rectified output current		Io		150	mA
Peak forward surge current	T_P = 1uS T_P = 1S	I_{FSM}		2 1	A
Power dissipation		P_D		200	mW
Thermal Resistance (Junction to ambient)		$R_{\theta JA}$		625	°C/W
Storage temperature		T_{STG}	-65	+150	°C
Junction temperature		T_j		+125	°C

Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 1 mA DC I_F = 10mA DC I_F = 50mA DC I_F =150mA DC	V_F			0.715 0.855 1.0 1.25	V
Reverse current	V_R = 20 V V_R = 75 V	I_R			25 1	nA uA
Capacitance between terminals	f = 1 MHz,and 0VDC reverse voltage	C_T			2	pF
Reverse recovery time	I_F = I_R=10 mA, R_L =100 ohms, Irr = 0.1 X I_R	T_{RR}			4	nS

Typical Characteristics (CDSV16-G)

Fig.1 - Forward Characteristics

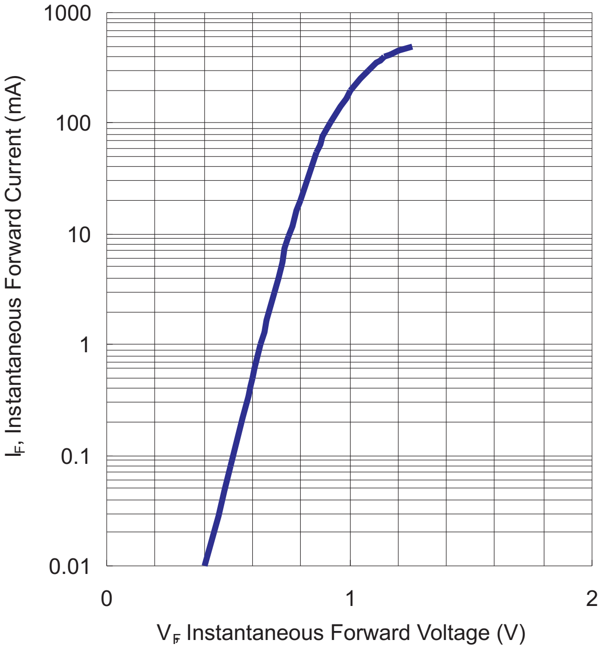


Fig.2 - Leakage current V.S. Junction Temperature