

SMD Switching Diode



SMD Diodes Specialist



CDSW16-G

High Speed RoHS Device Features

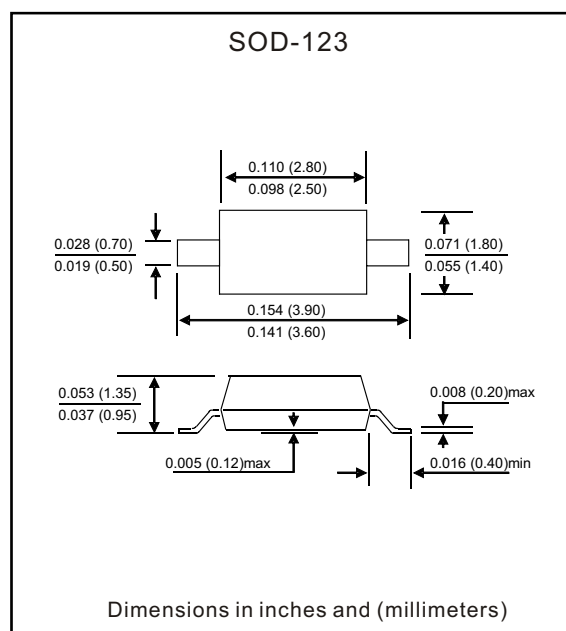
- Fast Switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion
- Flat Package SOD-123 in Stead mini-MELF Package

Mechanical data

Case: SOD-123, Molded Plastic

Terminals: Solderable per MIL-STD-202, Method 208

Weight: 0.01 gram(approx.).



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		I_o		150	mA
Peak forward surge current	$T_P = 1\mu S$ $T_P = 1 S$	I_{FSM}		2 1	A
Power dissipation		P_D		400	mW
Thermal Resistance (Junction to ambient)		$R_{\theta JA}$		315	°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	$I_F = 1\text{ mA DC}$ $I_F = 10\text{ mA DC}$ $I_F = 50\text{ mA DC}$ $I_F = 150\text{ mA DC}$	V_F			0.715 0.855 1.0 1.25	V
Reverse current	$V_R = 20\text{ V}$ $V_R = 75\text{ V}$	I_R			25 1	nA uA
Capacitance between terminals	$f = 1\text{ MHz}$, and 0VDC reverse voltage	C_T			2	pF
Reverse recovery time	$I_F = I_R = 10\text{ mA}$, $R_L = 100\text{ ohms}$, $I_{rr} = 0.1 \times I_R$	T_{RR}			4	nS

REV:A

Typical Characteristics (CDSW16-G)

Fig. 1 - Forward Characteristics

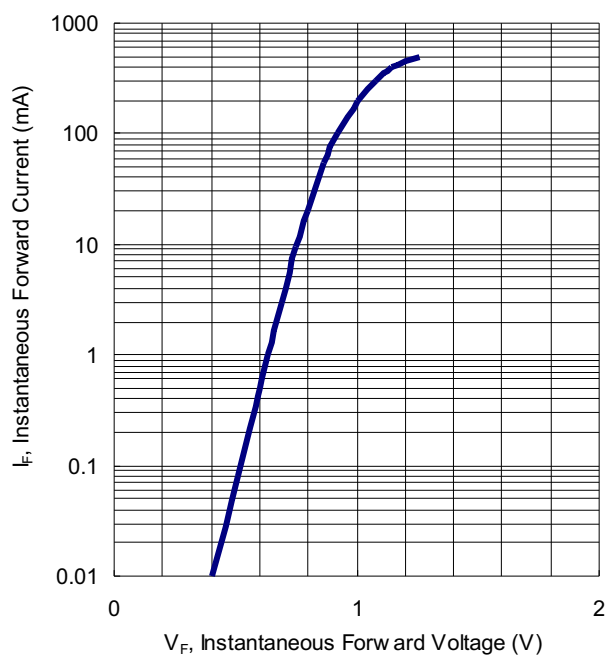


Fig. 2 - Leakage current V.S. Junction Temperature

