

## CDSV16-G

High Speed  
RoHS Device  
Features

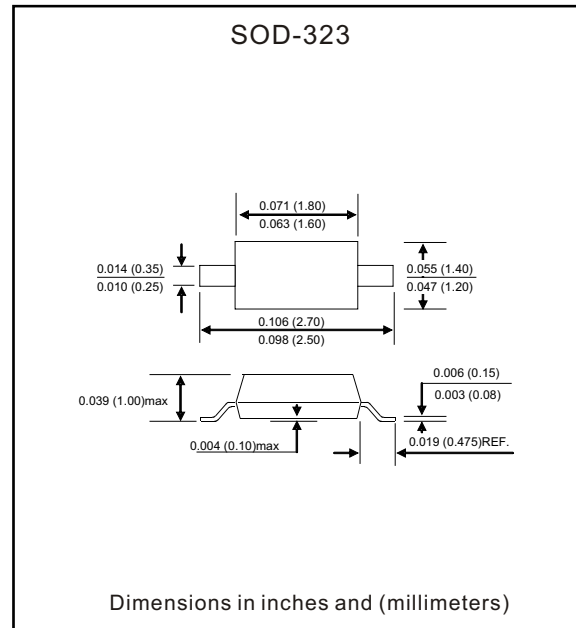
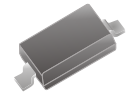
- Fast Switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion
- Flat Package SOD-123 in Stead mini-MELF Package

### Mechanical data

Case: SOD-323, 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		$P_D$		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	$I_F = 1\text{ mA DC}$ $I_F = 10\text{ mA DC}$ $I_F = 50\text{ mA DC}$ $I_F = 150\text{ mA DC}$	$V_F$			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

## Typical Characteristics (CDSV16-G)

Fig. 1 - Forward Characteristics

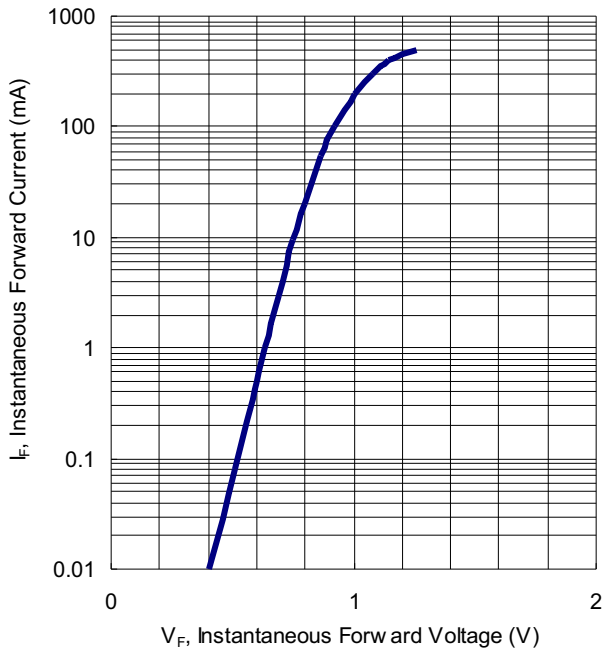


Fig. 2 - Leakage current V.S. Junction Temperature

