

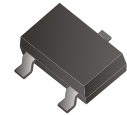
# SMD Switching Diode



SMD Diodes Specialist

## CDST193-G

RoHS Device



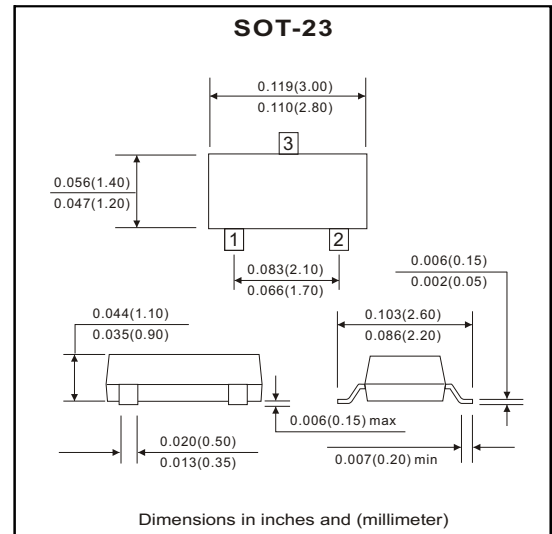
### Features

- Low forward voltage:  $V_F=0.9V$  (Typ.)
- Fast reverse recovery time:  $t_{rr}=1.6nS$  (Typ.)

**Polarity:**

1. ANODE
2. N.C.
3. CATHODE

**Marking: F3**



### Maximum Ratings (at $T_a=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-repetitive peak reverse voltage	$V_{RM}$	85	V
DC blocking voltage	$V_R$	80	V
Forward continuous current	$I_{FM}$	300*	mA
Average rectified output current	$I_o$	100*	mA
Power dissipation	$P_D$	150	mW
Junction temperature	$T_J$	125	$^{\circ}C$
Storage temperature	$T_{STG}$	-55 ~ +125	$^{\circ}C$

\*Unit rating. Total rating=Unit rating  $\times$  1.5

### Electrical Characteristics (at $T_a=25^{\circ}C$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Min	Max	Unit
Reverse breakdown voltage	$I_R=100\mu A$	$V_{(BR)R}$	80			V
Forward voltage	$I_F=1mA$	$V_{F1}$		0.60		V
	$I_F=10mA$	$V_{F2}$		0.72		V
	$I_F=100mA$	$V_{F3}$		0.90	1.2	V
Reverse current	$V_R=30V$	$I_{R1}$			0.1	$\mu A$
	$V_R=80V$	$I_{R2}$			0.5	$\mu A$
Capacitance between terminals	$V_R=0V, f=1MHz$	$C_T$		0.90	3.0	pF
Reverse recovery time	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R$	$t_{rr}$		1.60	4.0	nS

## RATING AND CHARACTERISTIC CURVES (CDST193-G)

Fig.1 Forward Voltage Characteristics

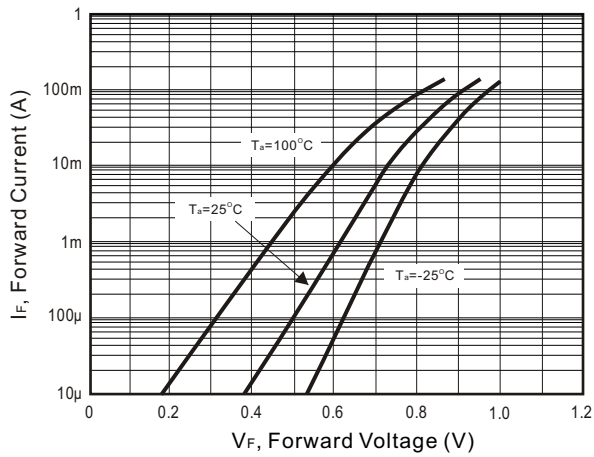


Fig.2 Reverse Characteristics

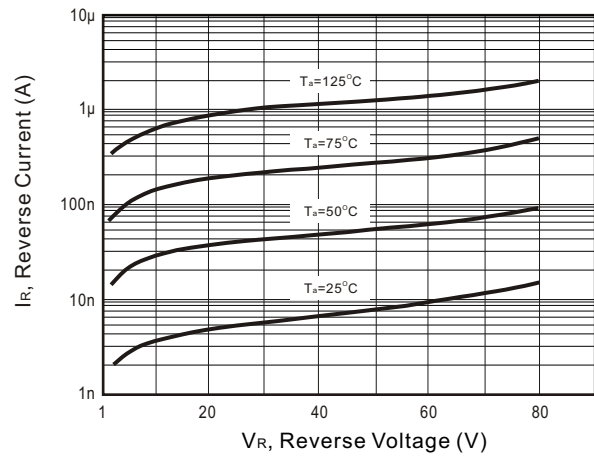


Fig.3 Capacitance Between Terminals

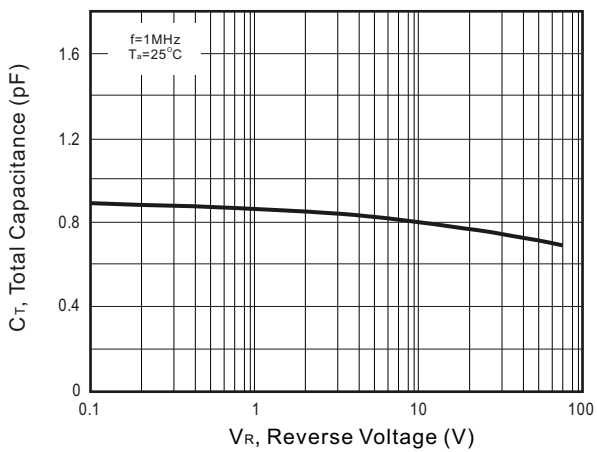


Fig.4 Reverse Recovery Time Characteristics

