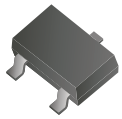
SMD Switching Diode

CDST193-G

RoHS Device



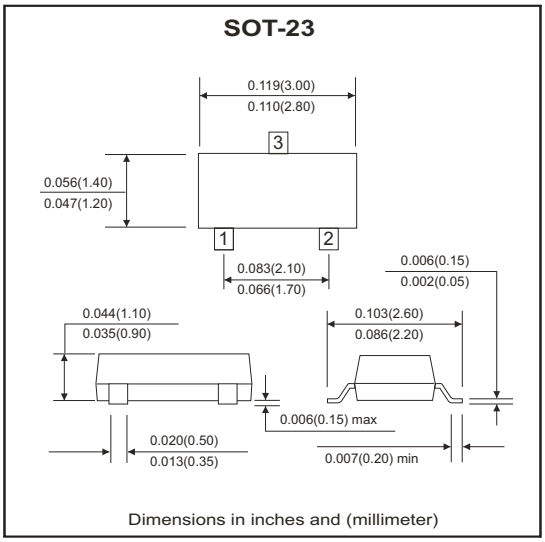
Features

-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 Ta=25°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	°C
Storage temperature	T_{STG}	-55 ~ +125	°C

*Unit rating. Total rating=Unit rating × 1.5

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

Parameter	Conditions	Symbol	Min	Min	Max	Unit
Reverse breakdown voltage	I_R=100μA	$V_{(BR)R}$	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	μA
	V_R=80V	I_{R2}			0.5	μA
Capacitance between terminals	V_R=0V, f=1MHz	C_T		0.90	3.0	pF
Reverse recovery time	I_F=I_R=10mA, Irr=0.1×I_R	t_{rr}		1.60	4.0	nS

RATING AND CHARACTERISTIC CURVES (CDST193-G)

Fig.1 - Forward Voltage Characteristics

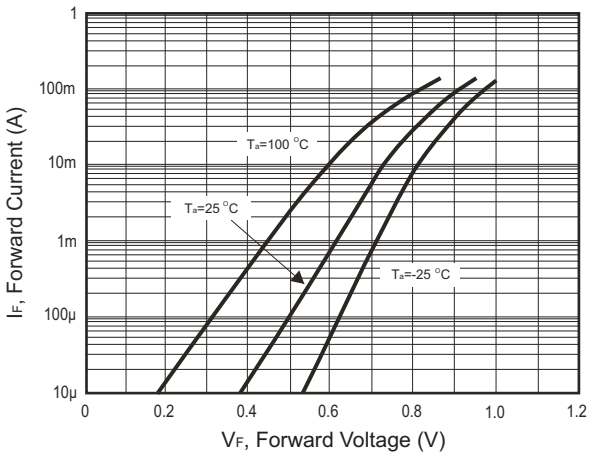


Fig.2 - Reverse Characteristics

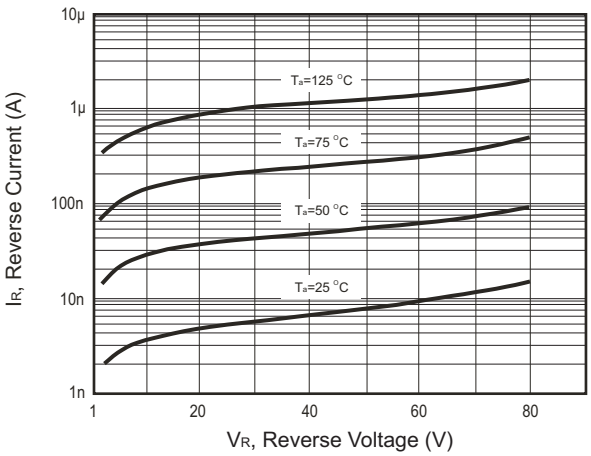


Fig.3 - Capacitance Between Terminals

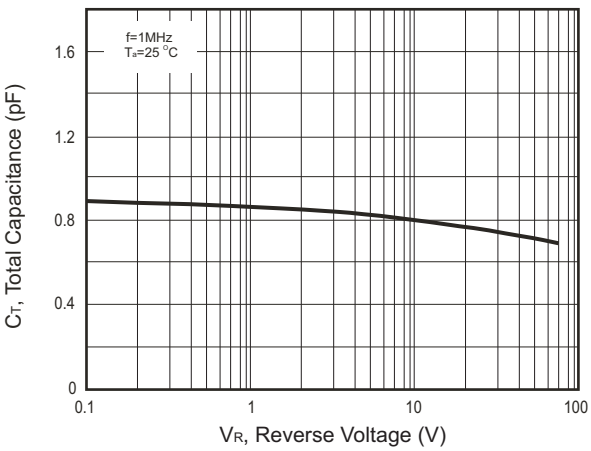


Fig.4 - Reverse Recovery Time Characteristics