

# Switching diode

## 1SS133

●Applications

High speed switching

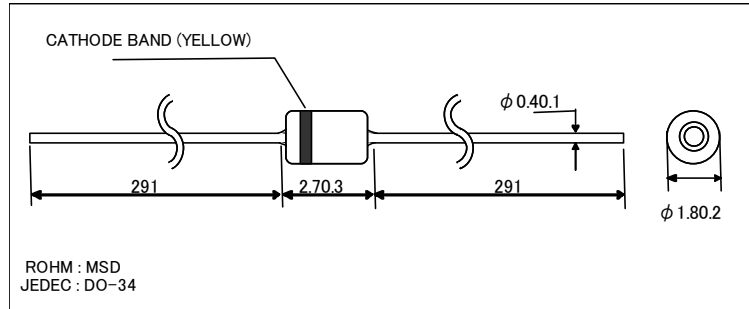
●Features

- 1) Glass sealed envelope. (MSD)
- 2) High reliability.

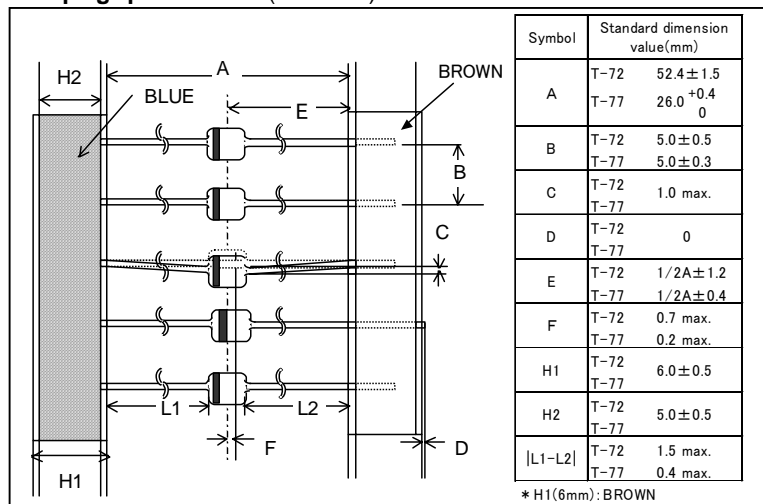
●Construction

Silicon epitaxial planar

●External dimensions (Unit : mm)



●Taping specifications (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

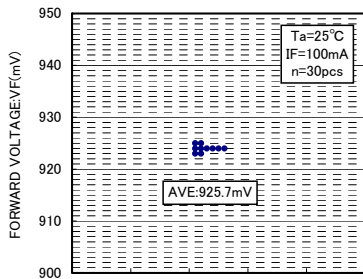
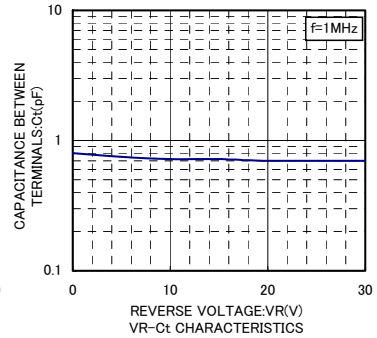
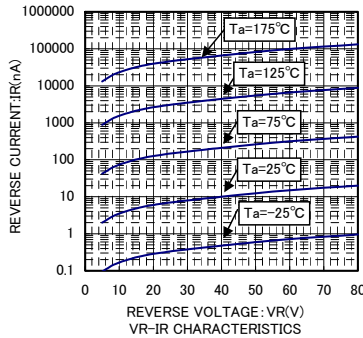
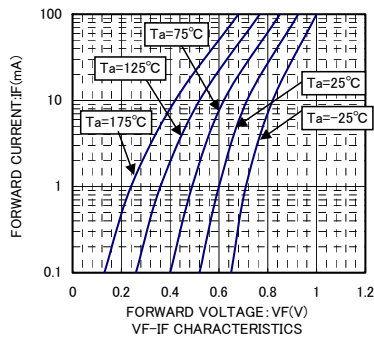
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	90	V
Reverse voltage (DC)	$V_R$	80	V
Forward voltage (repetitive peak)	$I_{FM}$	400	mA
Average rectified forward current	$I_o$	130	mA
Surge current (1s)	$I_{surge}$	600	mA
Power dissipation	P	300	mW
Junction temperature	$T_J$	175	°C
Storage temperature	$T_{stg}$	-65 to 175	°C

●Electrical characteristics (Ta=25°C)

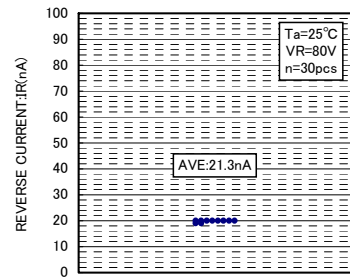
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	1.2	V	$I_F=100mA$
Reverse current	$I_R$	-	-	0.5	μA	$V_R=80V$
Capacitance between terminal	$C_t$	-	-	2	pF	$V_R=0.5V, f=1MHz$
Reverse recovery time	$T_{rr}$	-	-	4.0	ns	$V_R=6V, I_F=10mA, R_L=50\Omega, I_{rr}=1/10 I_R$

Diodes

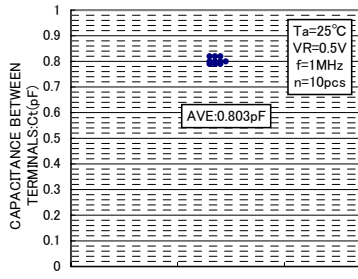
●Electrical characteristics curves (Ta=25°C)



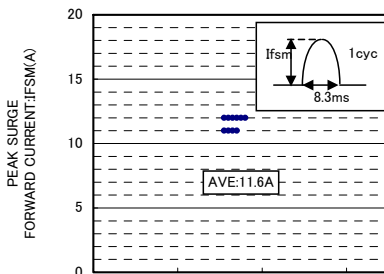
VF DISPERSION MAP



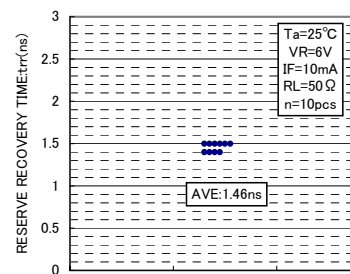
IR DISPERSION MAP



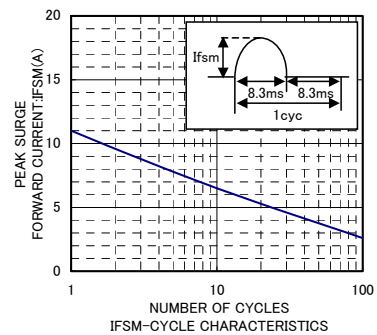
Ct DISPERSION MAP



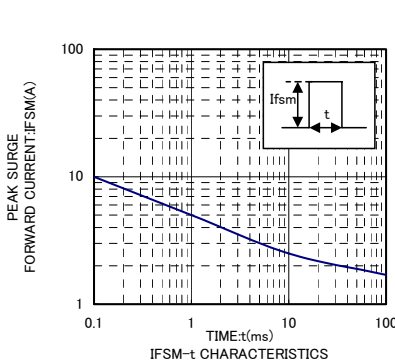
IFSM DISERSION MAP



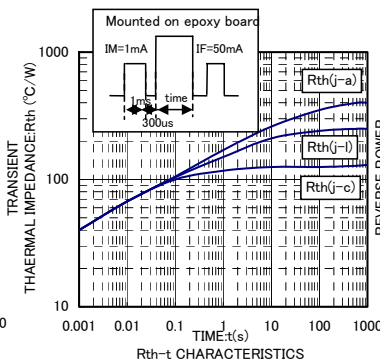
trr DISPERSION MAP



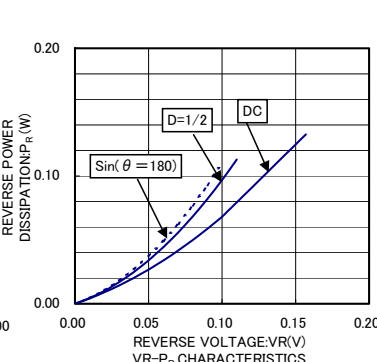
IFSM-CYCLE CHARACTERISTICS



IFSM-t CHARACTERISTICS

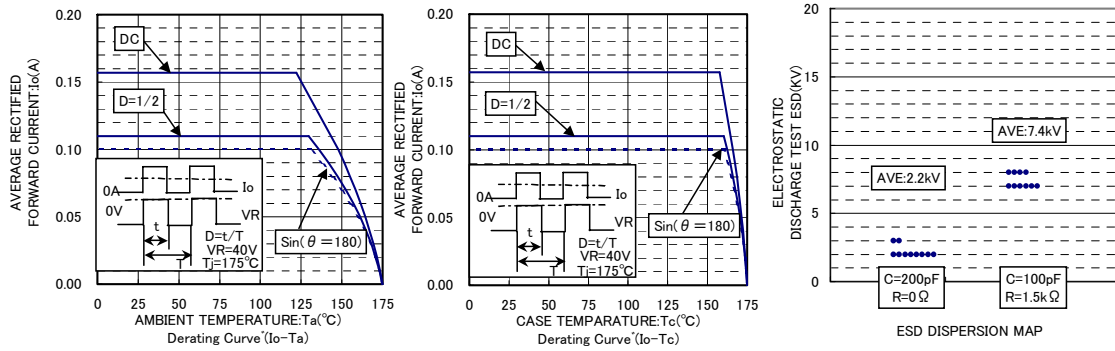


Rth-t CHARACTERISTICS



VR-Pr CHARACTERISTICS

Diodes



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