

# Rectifier diode

## 1SR153-400

**●Applications**

For fast rectifier

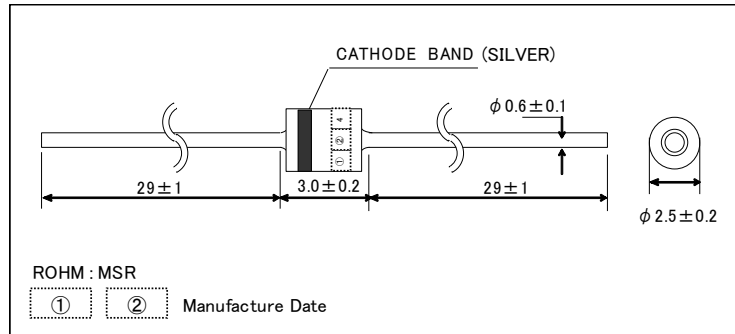
**●Features**

- 1) Cylindrical mold type. (MSR)
- 2) High reliability.
- 3) High switching speed.

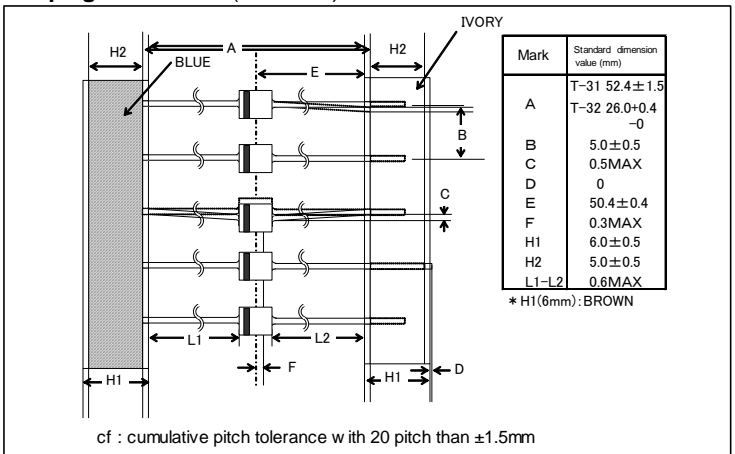
**●Construction**

Silicon diffused junction

**●External dimensions (Unit : mm)**



**●Taping dimensions (Unit : mm)**



**●Absolute maximum ratings (Ta=25°C)**

Parameter	Symbol	Limits	Unit
Maximum peak surge reverse voltage	$V_{RMS}$	500	V
Surge reverse voltage	$V_R$	400	V
Average rectified forward current (*1)	$I_o$	1	A
Forward current surge peak (60Hz · 1cyc)	$I_{FSM}$	30	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-40 to +150	°C

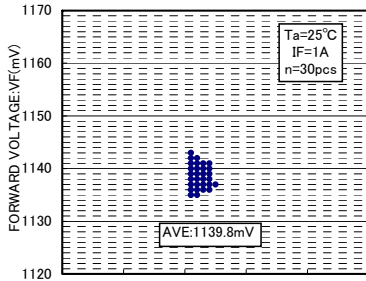
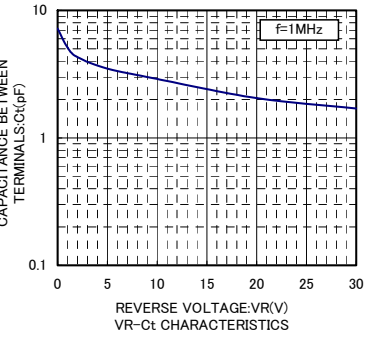
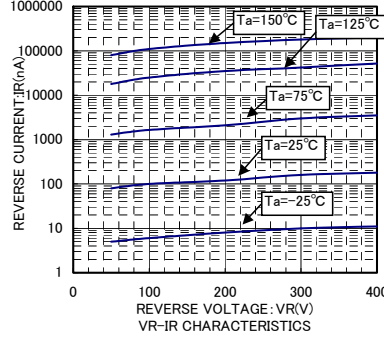
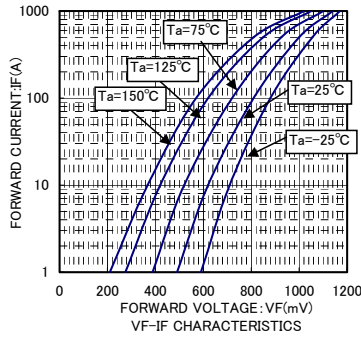
(\*1) Mounting on alumina board

**●Electrical characteristics (Ta=25°C)**

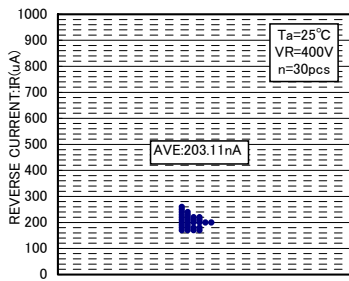
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	1.3	V	$I_F=0.8A$
Reverse current	$I_R$	-	-	10	uA	$V_R=400V$
Reverse recovery time	$t_{rr}$	-	-	0.4	us	$I_F=10mA, I_R=10mA, I_{rr}=1mA$

Diodes

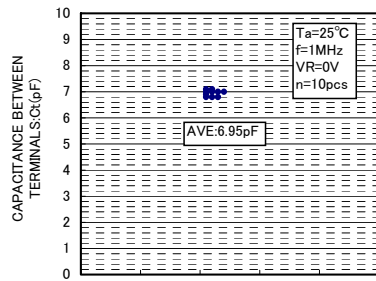
●Electrical characteristic curves (Ta=25°C)



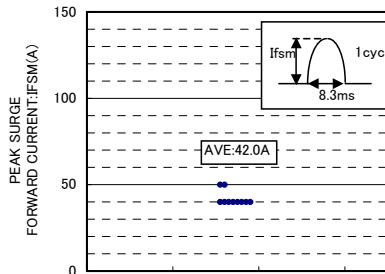
VF DISPERSION MAP



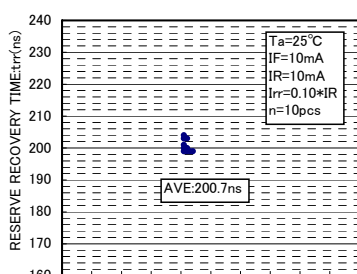
IR DISPERSION MAP



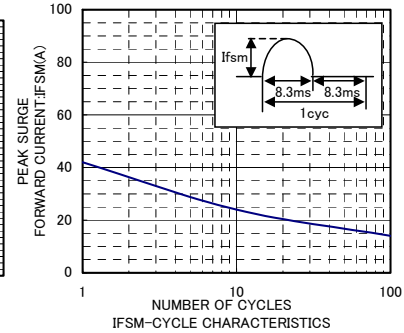
Ct DISPERSION MAP



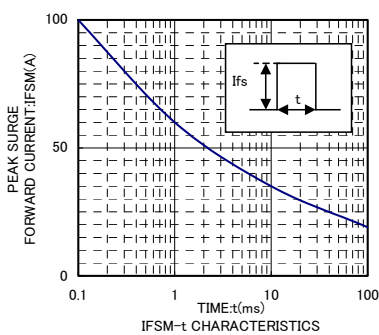
IFSM DISERSION MAP



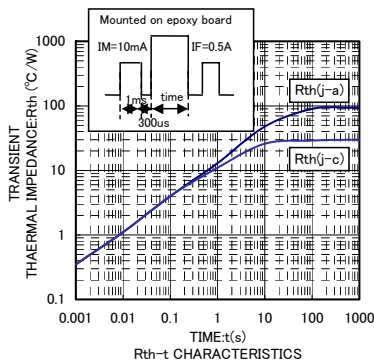
trr DISPERSION MAP



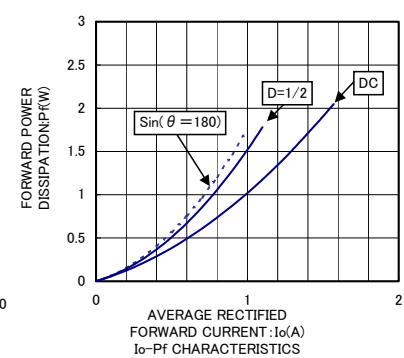
IFSM-CYCLE CHARACTERISTICS



IFSM-t CHARACTERISTICS

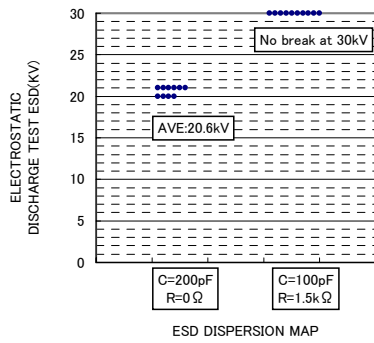
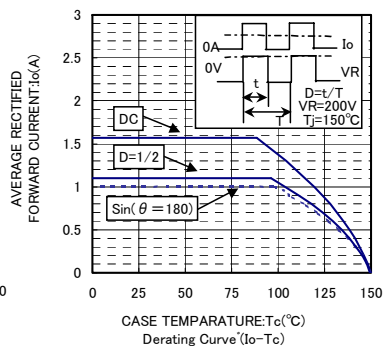
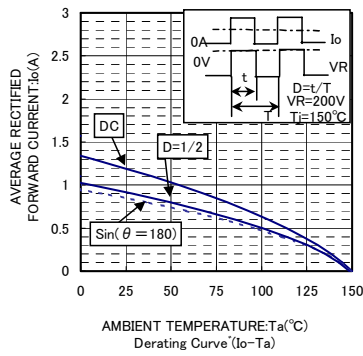
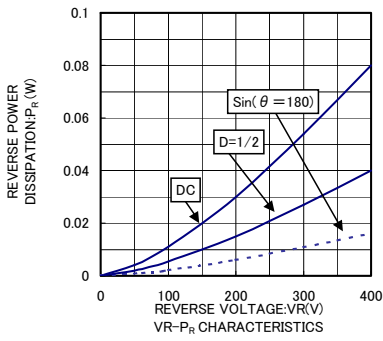


Rth-t CHARACTERISTICS



Io-Pf CHARACTERISTICS

Diodes



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