Rectifier diode

1SR139-400

●**Applications**

High speed rectification

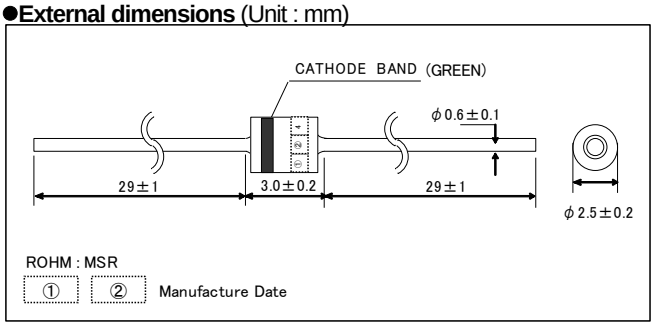
●**Features**

1) Cylindrical mold. (MSR)
2) High reliability.
3) Fast recovery speed.

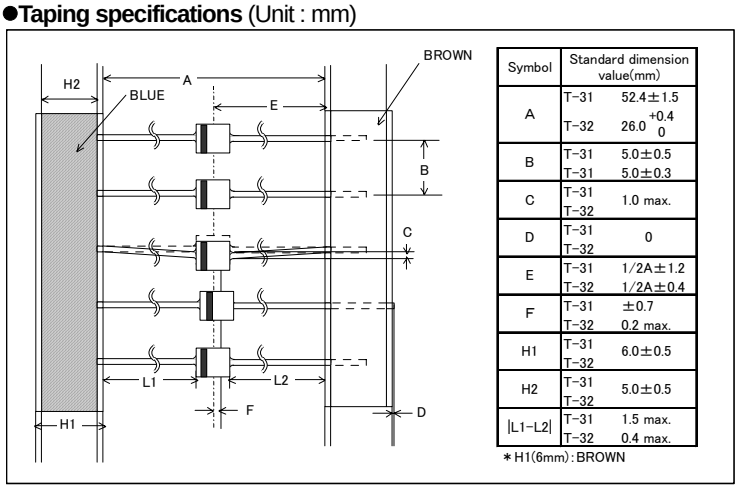
●**Construction**

Silicon diffused junction

●**External dimensions** (Unit : mm)



●**Taping specifications** (Unit : mm)



Symbol	Standard dimension value(mm)	
A	T-31	52.4±1.5
	T-32	26.0 +0.4 0
B	T-31	5.0±0.5
	T-31	5.0±0.3
C	T-31 T-32	1.0 max.
D	T-31 T-32	0
E	T-31	1/2A±1.2
	T-32	1/2A±0.4
F	T-31	±0.7
	T-32	0.2 max.
H1	T-31 T-32	6.0±0.5
H2	T-31 T-32	5.0±0.5
|L1-L2|	T-31	1.5 max.
	T-32	0.4 max.

＊H1(6mm) : BROWN

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

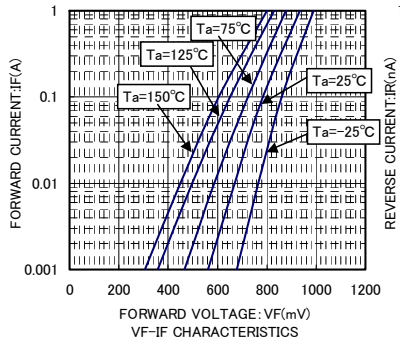
Parameter	Symbol	Limits	Unit
Absolute peak reverse voltage	V_{RMS}	500	V
Reverse voltage (repetitive peak)	V_R	400	V
Average rectified forward current (*1)	Io	1	A
Forward current surge peak (60Hz・1cyc)	I_{FSM}	40	A
Junction temperature	Tj	150	℃
Storage temperature	Tstg	-40 to +150	℃

(*1) Mounting on alumina board

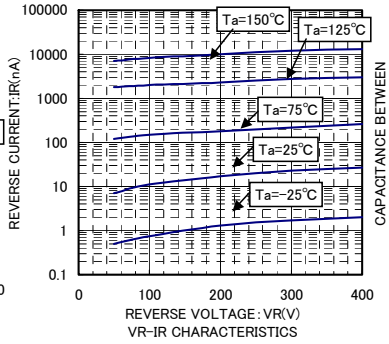
●**Electrical characteristics** (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	1.1	V	I_F=1.0A
Reverse current	I_R	-	-	10	uA	V_R=400V

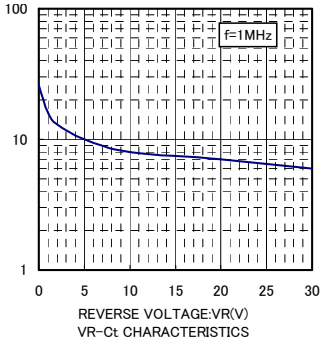
●**Electrical characteristic curves** (Ta=25°C)



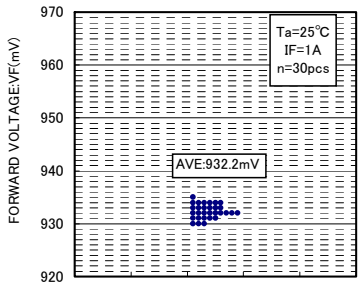
FORWARD VOLTAGE:VF(mV)
VF-IF CHARACTERISTICS



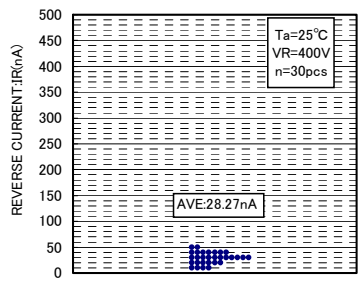
REVERSE VOLTAGE:VR(V)
VR-IR CHARACTERISTICS



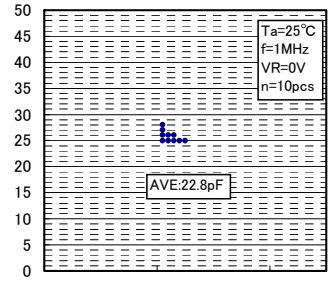
REVERSE VOLTAGE:VR(V)
VR-Ct CHARACTERISTICS



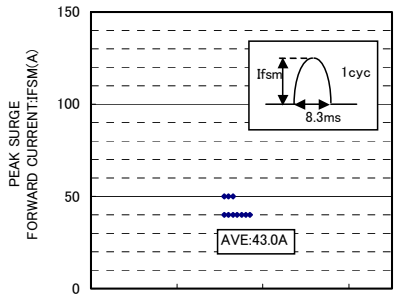
VF DISPERSION MAP



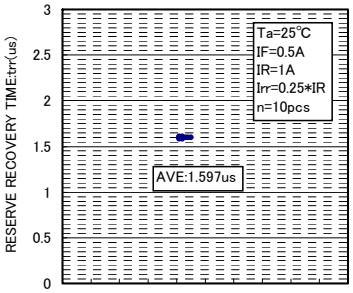
IR DISPERSION MAP



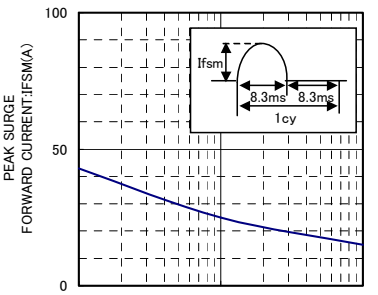
Ct DISPERSION MAP



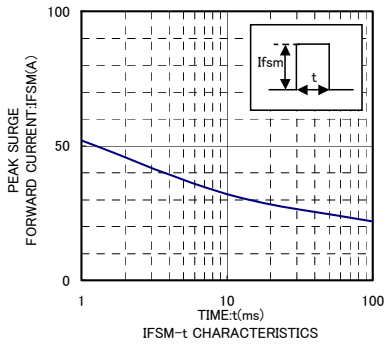
IFSM DISRESION MAP



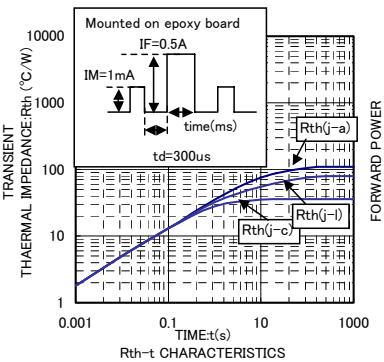
trr DISPERSION MAP



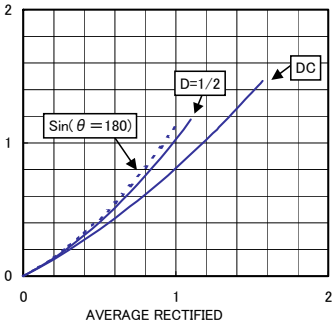
IFSM-CYCLE CHARACTERISTICS



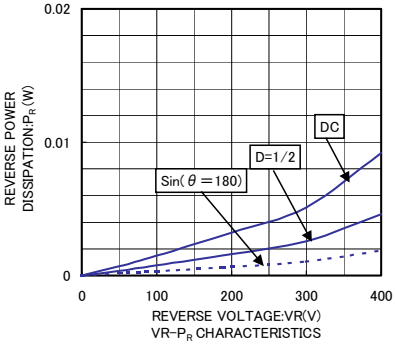
IFSM-t CHARACTERISTICS

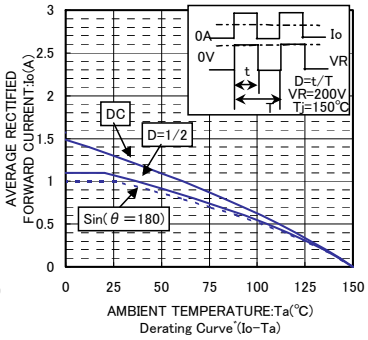


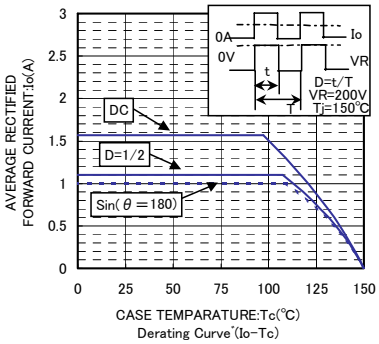
Rth-t CHARACTERISTICS

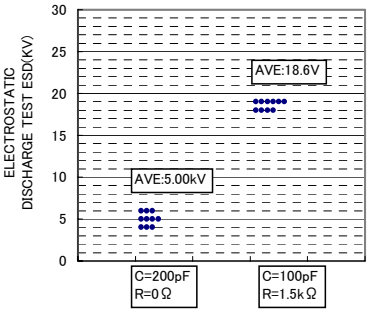


Io-Pf CHARACTERISTICS









ESD DISPERSION MAP

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