# Fast recovery diode

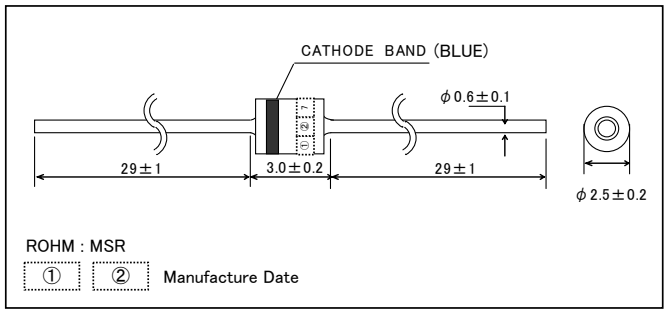
## RF101A2S

●**Applications**
General rectification

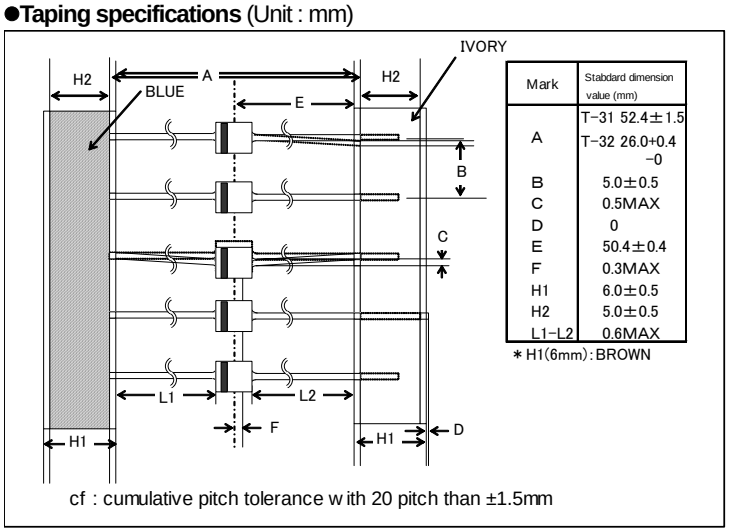
●**Features**
1) Cylindrical mold type. (MSR)
2) Ultra Low $V_F$.
3) Ultra high switching.
4) Low switching loss.
5) High ESD.

●**Construction**
Silicon epitaxial planar

●**Dimensions** (Unit : mm)




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




| Mark | Stabdard dimension value (mm) |
|---|---|
| A | T-31 52.4±1.5<br>T-32 26.0+0.4 −0 |
| B | 5.0±0.5 |
| C | 0.5MAX |
| D | 0 |
| E | 50.4±0.4 |
| F | 0.3MAX |
| H1 | 6.0±0.5 |
| H2 | 5.0±0.5 |
| L1-L2 | 0.6MAX |

＊H1(6mm) : BROWN

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

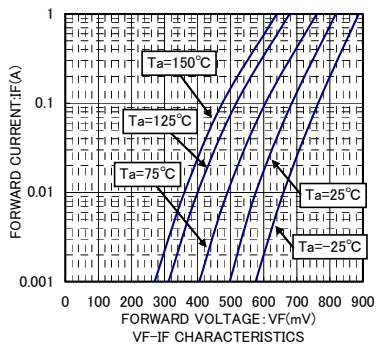
| Parameter | Symbol | Limits | Unit |
|---|---|---|---|
| Reverse voltage (repetitive) | $V_{RM}$ | 200 | V |
| Reverse voltage (DC) | $V_R$ | 200 | V |
| Average rectified forward current(*1) | Io | 1 | A |
| Forward current surge peak（60Hz・1cyc） | $I_{FSM}$ | 20 | A |
| Junction temperature | Tj | 150 | ℃ |
| Storage temperature | Tstg | -55 to +150 | ℃ |

(*1)Mounting on epoxi board. 180°Half sine wave

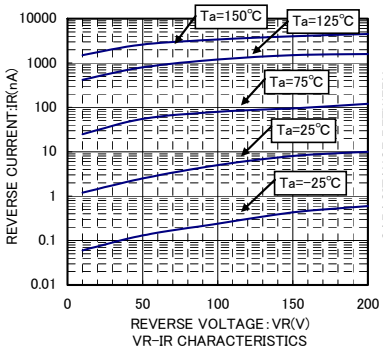
●**Electrical characteristic** (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|---|---|---|---|---|---|---|
| Forward voltage | $V_F$ | - | 0.815 | 0.87 | V | $I_F$=1.0A |
| Reverse current | $I_R$ | - | 0.01 | 10 | μA | $V_R$=200V |
| Reverse recovery time | trr | - | 12 | 25 | ns | $I_F$=0.5A,$I_R$=1A,Irr=0.25*$I_R$ |

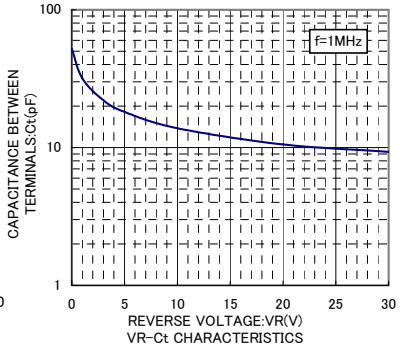
## ●Electrical characteristic curves



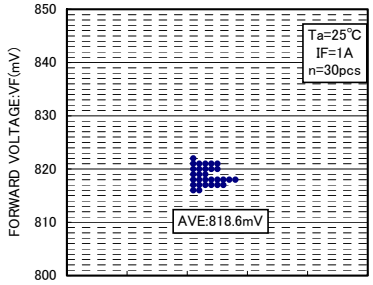

VF-IF CHARACTERISTICS



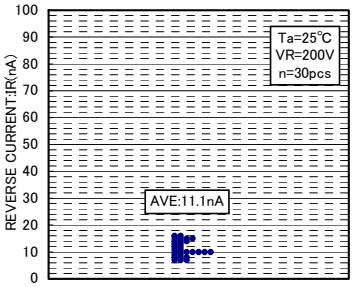

VR-IR CHARACTERISTICS



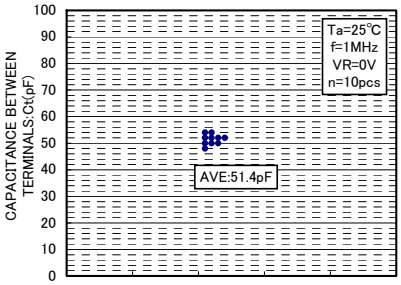

VR-Ct CHARACTERISTICS



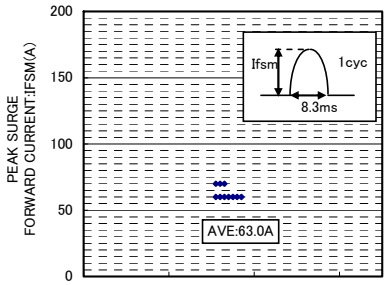

VF DISPERSION MAP



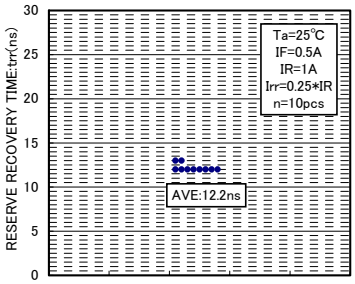

IR DISPERSION MAP



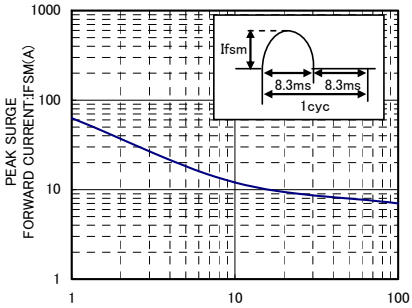

Ct DISPERSION MAP



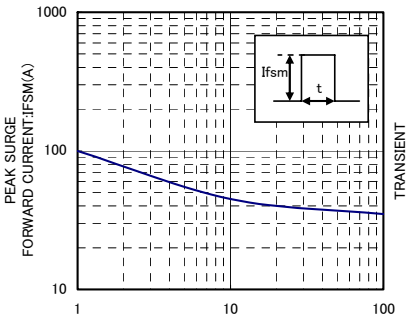

IFSM DISPERSION MAP



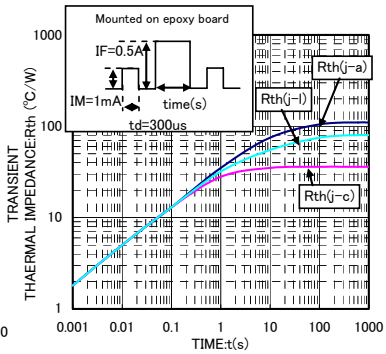

trr DISPERSION MAP



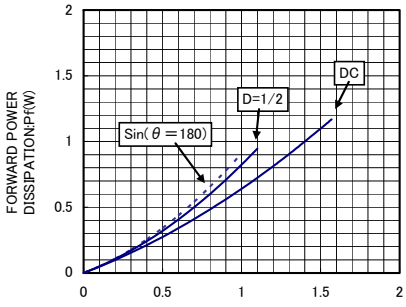

IFSM-CYCLE CHARACTERISTICS



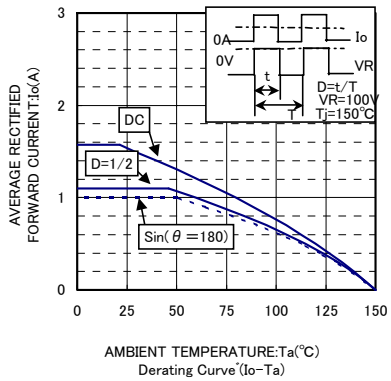

IFSM-t CHARACTERISTICS



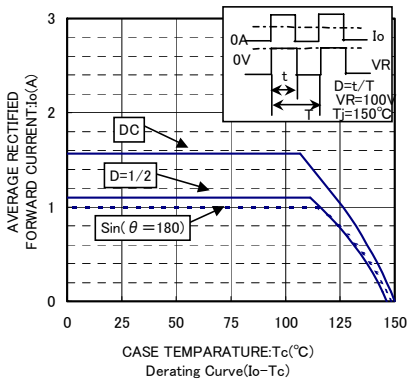

Rth-t CHARACTERISTICS



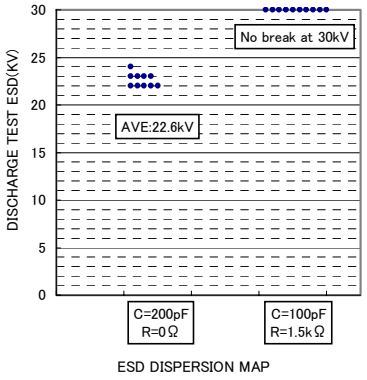

Io-Pf CHARACTERISTICS




Derating Curve(Io-Ta)




Derating Curve(Io-Tc)




ESD DISPERSION MAP

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