ShinDengen

# SG10SC9M

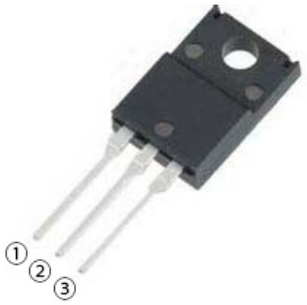
## Schottky Barrier Diodes
## 90V, 10A

### Feature

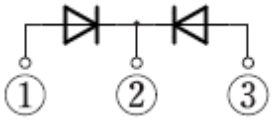
- High Recovery Speed
- Tj=175°C
- Pb free terminal
- RoHS:Yes

### OUTLINE

**Package (House Name):** FTO-220G
**Package (JEITA Code):** SC-91




### Equivalent circuit




### Absolute Maximum Ratings (unless otherwise specified : Tc=25°C)

| Item | Symbol | Conditions | Ratings | Unit |
|---|---|---|---|---|
| Storage temperrature | Tstg | | -55 to 175 | °C |
| Junction temperature | Tj | | -55 to 175 | °C |
| Repetitive peak reverse voltage | $V_{RRM}$ | | 90 | V |
| Repetitive peak surge reverse voltage | $V_{RRSM}$ | Pulse width 0.5ms, duty=1/40 | 100 | V |
| Average forward current | $I_F$(AV) | 50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, With heatsink, Tc=139°C | 10 | A |
| Surge forward current | $I_{FSM}$ | 50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C | 150 | A |
| Dielectric strength | Vdis | Terminals to case backside, AC 1 minute. | 1.5 | kV |
| Mounting torque | TOR | (Recommended torque：0.3N･m) | 0.5 | N･m |

※ ：See the original Specifications



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## Electrical Characteristics (unless otherwise specified : Tc=25°C)

| Item | Symbol | Conditions | Ratings | | | Unit |
|---|---|---|---|---|---|---|
| | | | MIN | TYP | MAX | |
| Forward voltage | $V_F$ | IF=5A, Pulse measurement, per diode | | 0.65 | 0.75 | V |
| Reverse current | $I_R$ | VR=90V, Pulse measurement, per diode | | | 0.5 | mA |
| Total capacitance | Ct | f=1MHz, VR=10V, per diode | | 140 | | pF |
| Thermal resistance | Rth(j-c) | Junction to case, With heatsink | | | 3 | °C/W |

※ ：See the original Specifications



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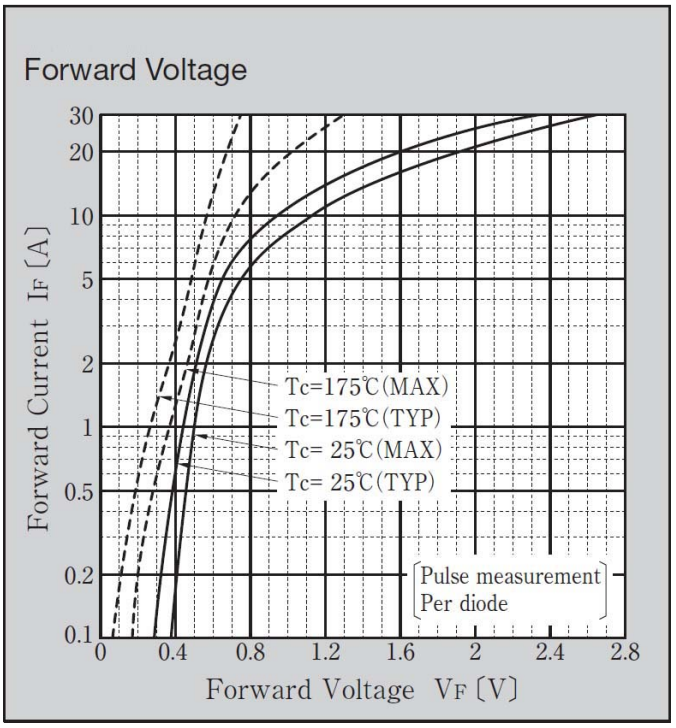
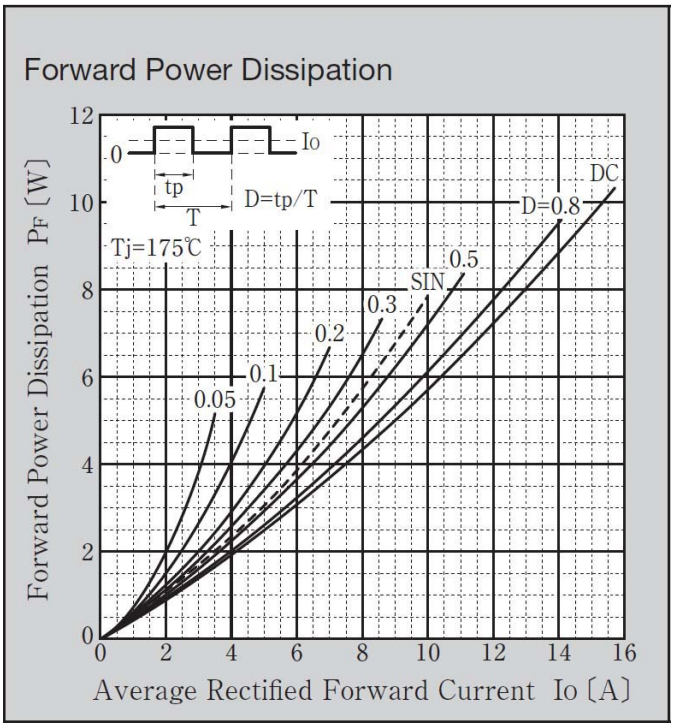
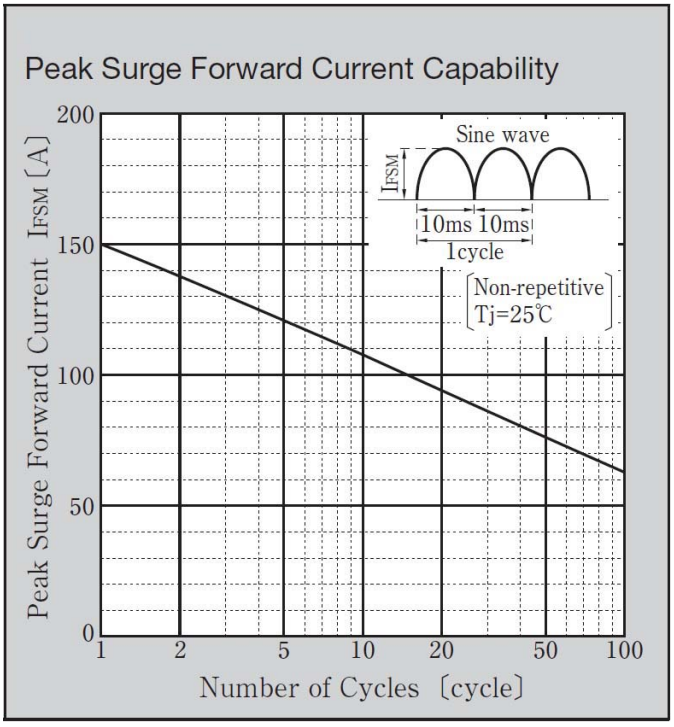
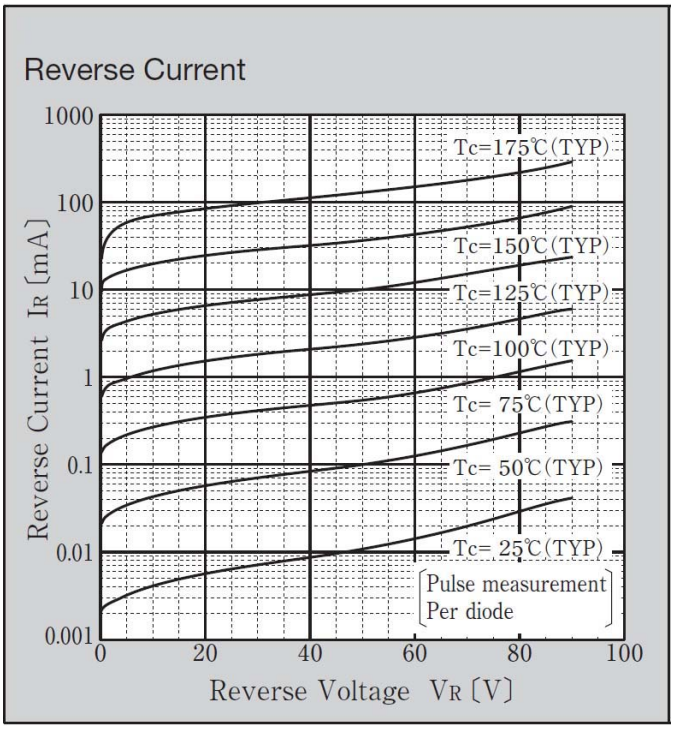
## CHARACTERISTIC DIAGRAMS



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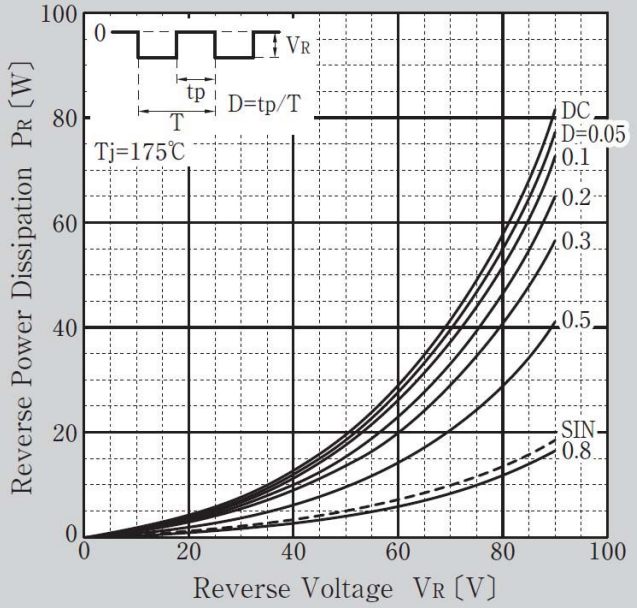
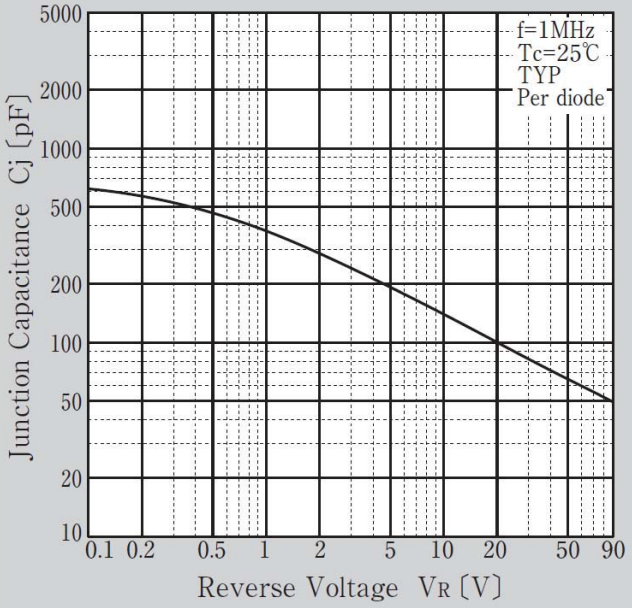
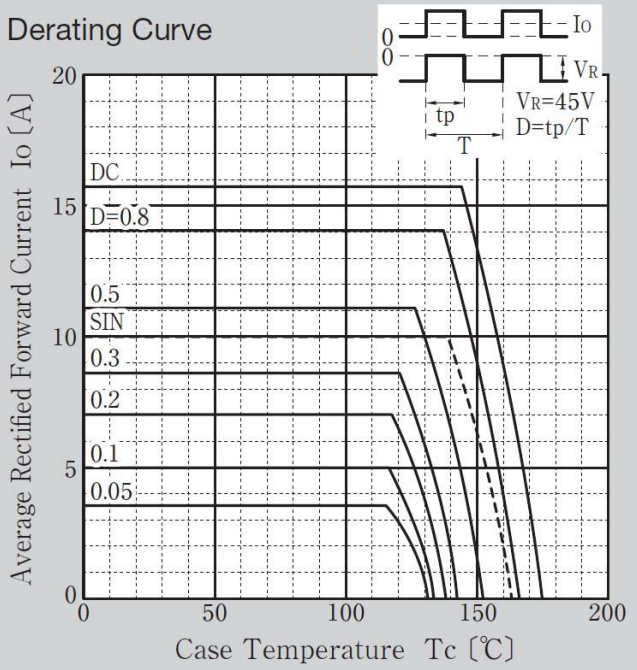
## Reverse Power Dissipation




## Junction Capacitance




## Derating Curve



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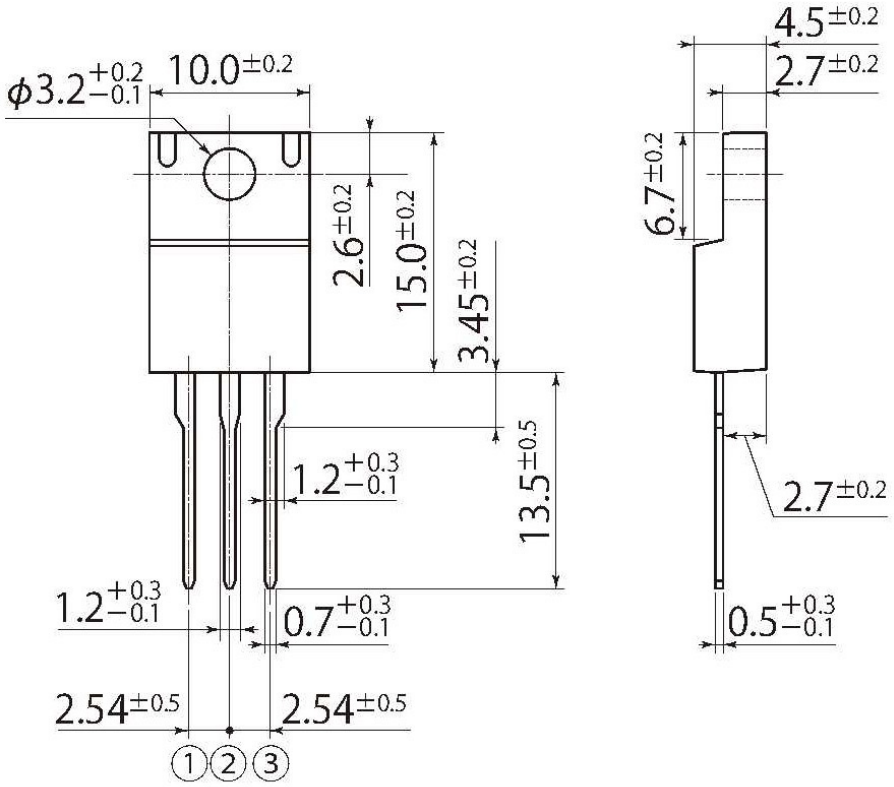
## Outline Dimensions

unit:mm

J9

| | |
|---|---|
| JEDEC Code | – |
| JEITA Code | SC-91 |
| House Name | FTO-220G(3pin) |



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