

SG10SC3LM

Schottky Barrier Diodes

30V, 10A

Feature

- High Recovery Speed
- Low V_F
- Pb free terminal
- RoHS:Yes

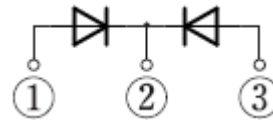
OUTLINE

Package (House Name): FTO-220G

Package (JEITA Code): SC-91



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : $T_c=25^\circ\text{C}$)

| Item | Symbol | Conditions | Ratings | Unit |
|---------------------------------------|------------|--|------------|-------------------------|
| Storage temperature | T_{stg} | | -55 to 150 | $^\circ\text{C}$ |
| Junction temperature | T_j | | 150 | $^\circ\text{C}$ |
| Repetitive peak reverse voltage | V_{RRM} | | 30 | V |
| Repetitive peak surge reverse voltage | V_{RRSM} | Pulse width 0.5ms, duty=1/40 | 35 | V |
| Average forward current | $I_F(AV)$ | 50Hz sine wave, Resistance load, Rating for each diode $I_F(AV)/2$, $T_c=136^\circ\text{C}$ | 10 | A |
| Surge forward current | I_{FSM} | 50Hz sine wave, Non-repetitive, 1 cycle, Peak value, $T_j=25^\circ\text{C}$ | 150 | A |
| Surge forward current | I_{FSM1} | $t_p=1\text{ms}$, Sine wave, Non-repetitive, Peak value, $T_j=25^\circ\text{C}$ | 325 | A |
| Dielectric strength | V_{dis} | Terminals to case backside, AC 1 minute. | 1.5 | kV |
| Mounting torque | TOR | (Recommended torque : $0.3\text{N}\cdot\text{m}$) | 0.5 | $\text{N}\cdot\text{m}$ |

* : See the original Specifications

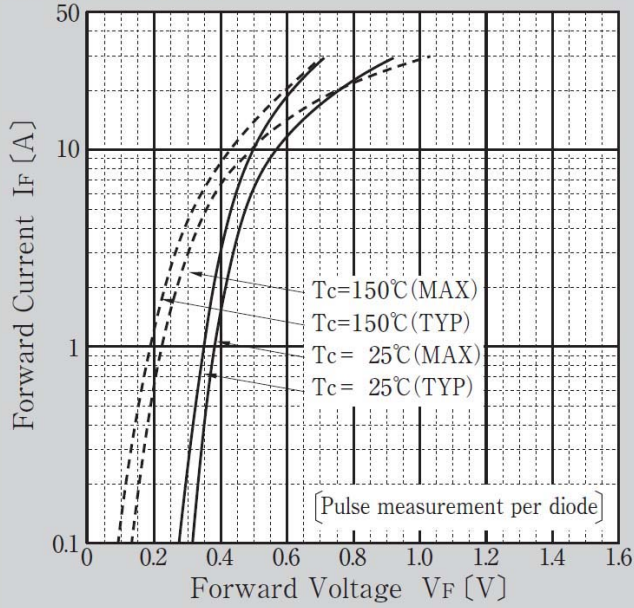
Electrical Characteristics (unless otherwise specified : Tc=25°C)

| Item | Symbol | Conditions | Ratings | | | Unit |
|--------------------|----------------------|---|---------|-----|------|------|
| | | | MIN | TYP | MAX | |
| Forward voltage | V _F | I _F =4A, Pulse measurement, per diode | | 0.4 | 0.45 | V |
| Reverse current | I _R | V _R =30V, Pulse measurement, per diode | | | 5 | mA |
| Total capacitance | C _t | f=1MHz, V _R =10V, per diode | | 310 | | pF |
| Thermal resistance | R _{th(j-c)} | Junction to case | | | 3 | °C/W |

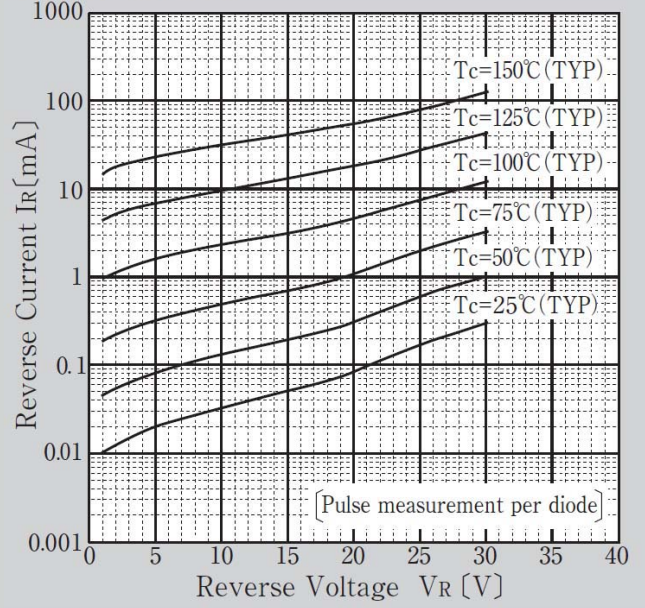
* : See the original Specifications

CHARACTERISTIC DIAGRAMS

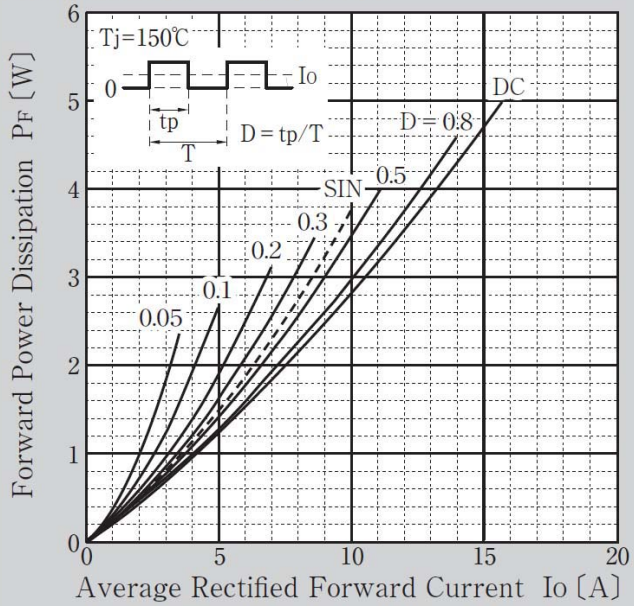
Forward Voltage



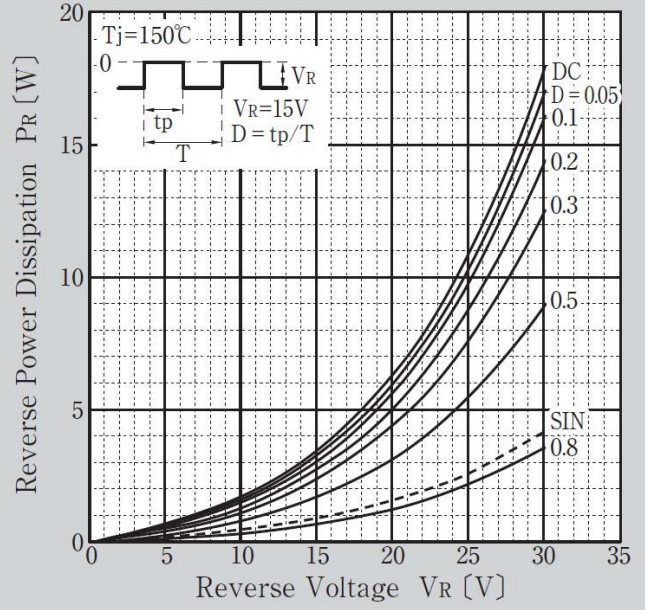
Reverse Current

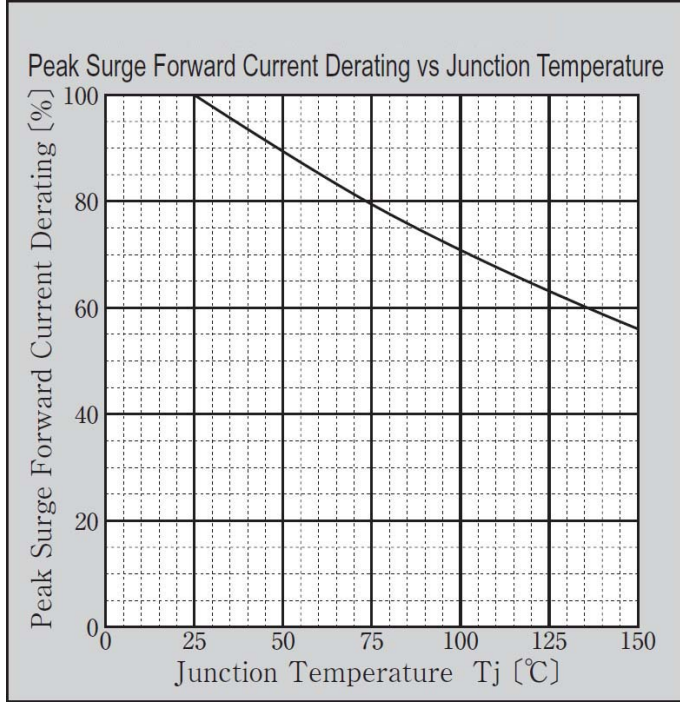
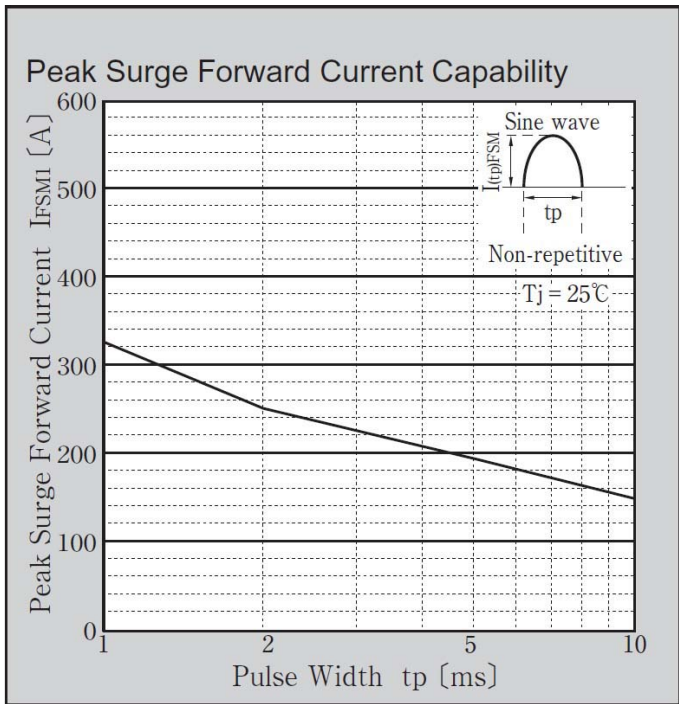
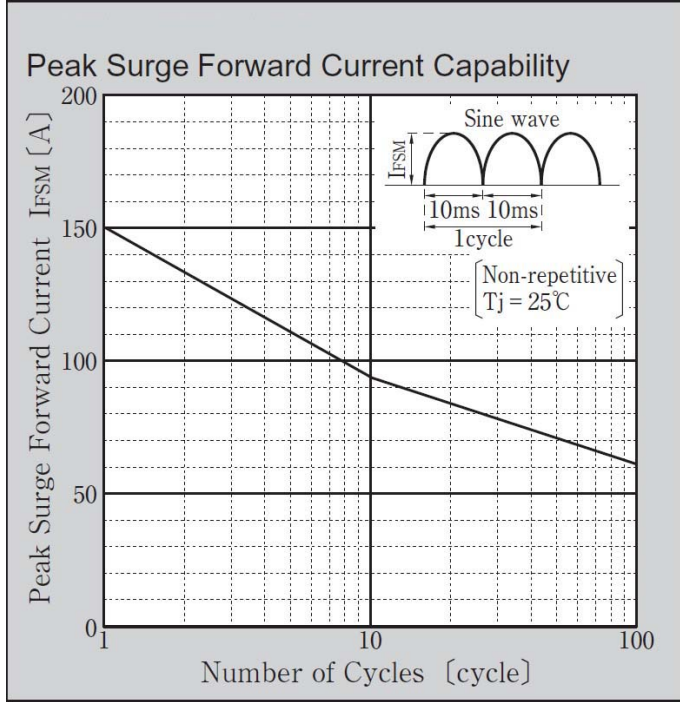
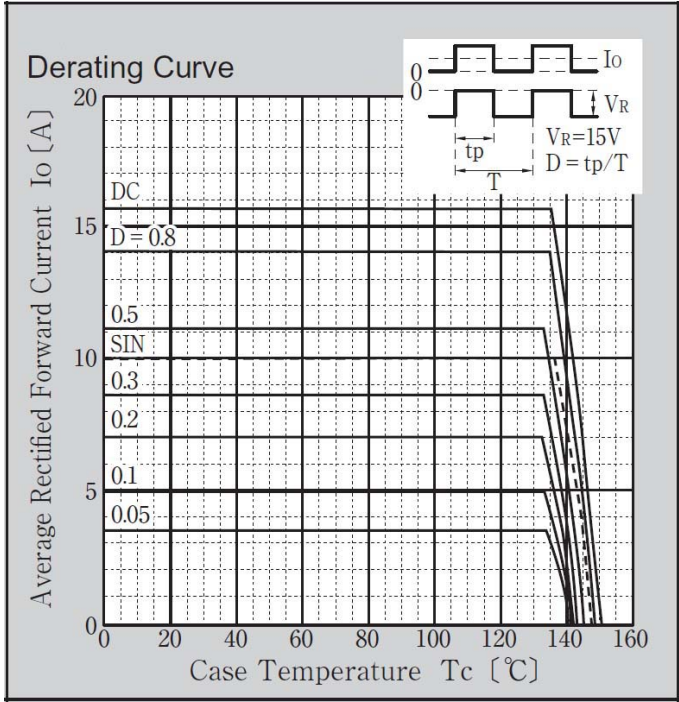


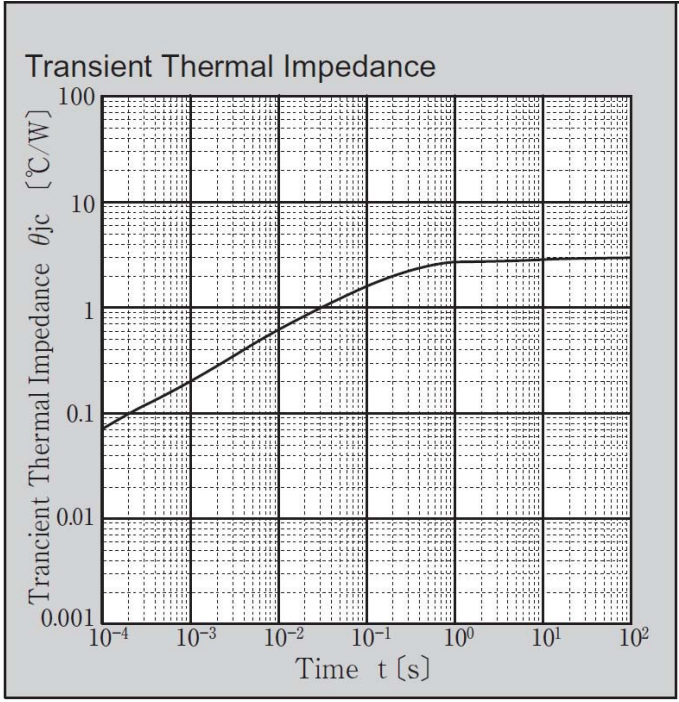
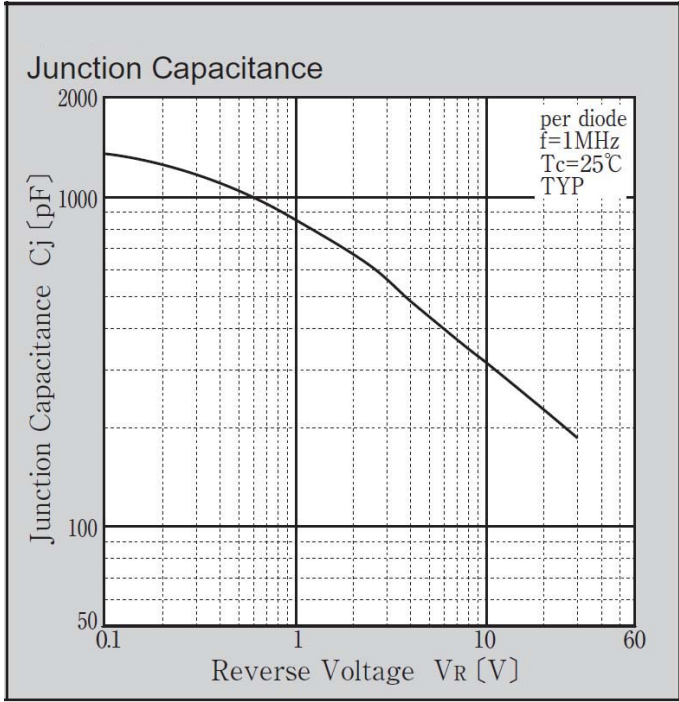
Forward Power Dissipation



Reverse Power Dissipation

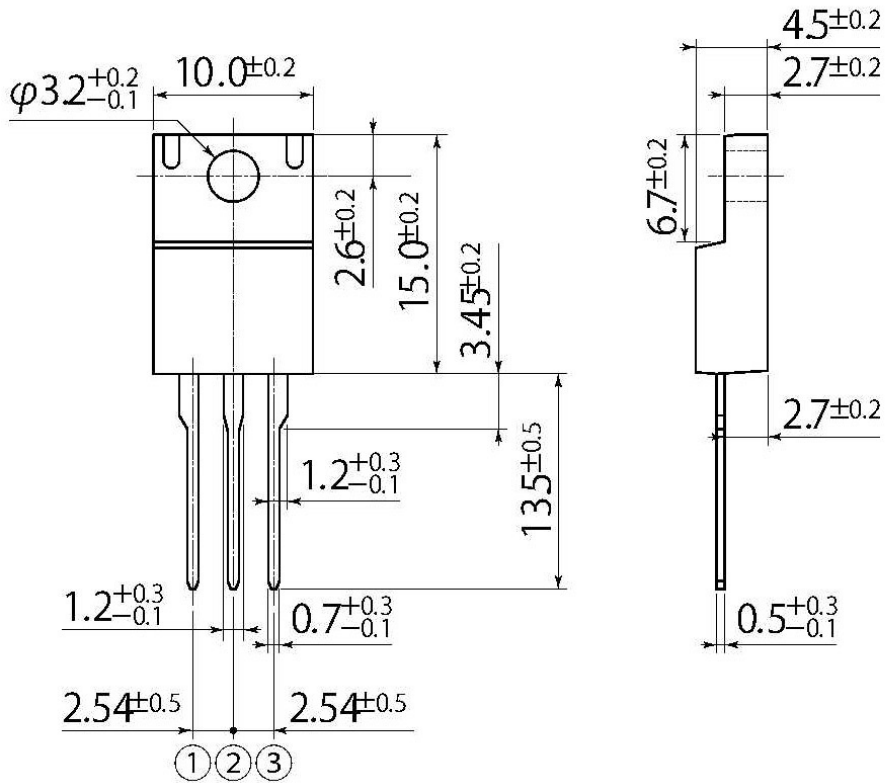






J9

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



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