

ST70-27F

TVS
180A, 7000W

Feature

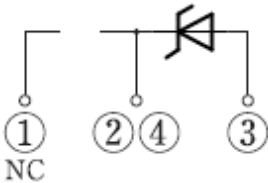
- Peak pulse power:7000W
- SMD
- Available for automotive use
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): STO-220
Package (JEITA Code): SC-83 similar



Equivalent circuit



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

| Item | Symbol | Conditions | Ratings | Unit |
|-------------------------------------|--------------------|---------------------------|------------|------|
| Storage temperature | Tstg | | -40 to 150 | °C |
| Operating junction temperature | Tj | | 150 | °C |
| Maximum surge reverse current | I _{RSM} | 10/1000μs, Non-repetitive | 180 | A |
| Maximum surge reverse power | P _{RSM} | 10/1000μs, Non-repetitive | 7000 | W |
| Continuous (direct) reverse voltage | V _{R(DC)} | | 23 | V |
| Maximum forward power | P _F | TI=25°C | 5 | W |

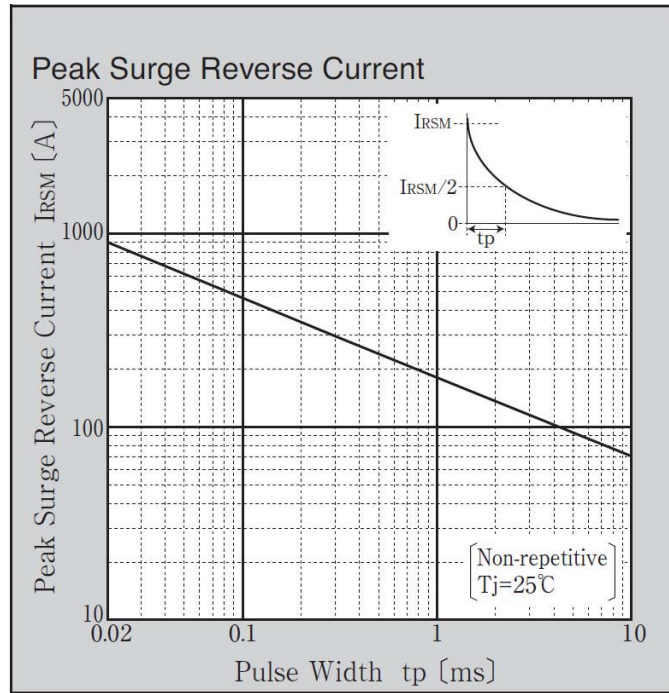
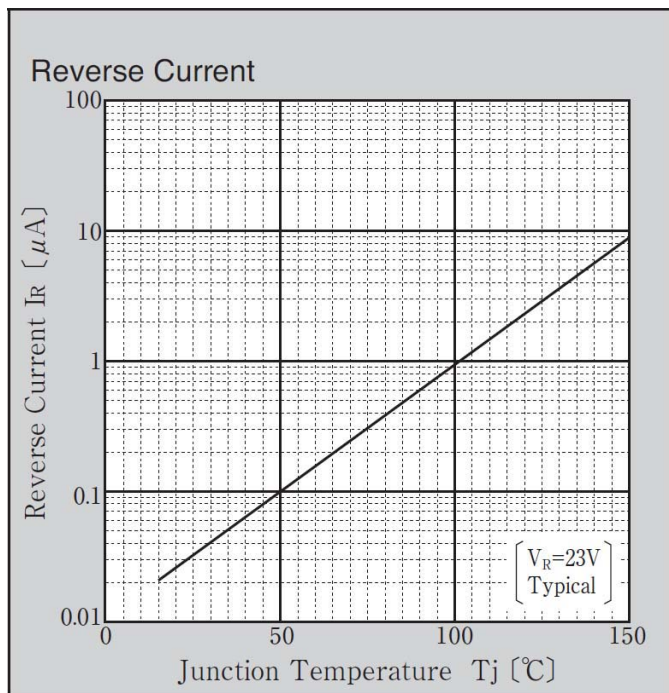
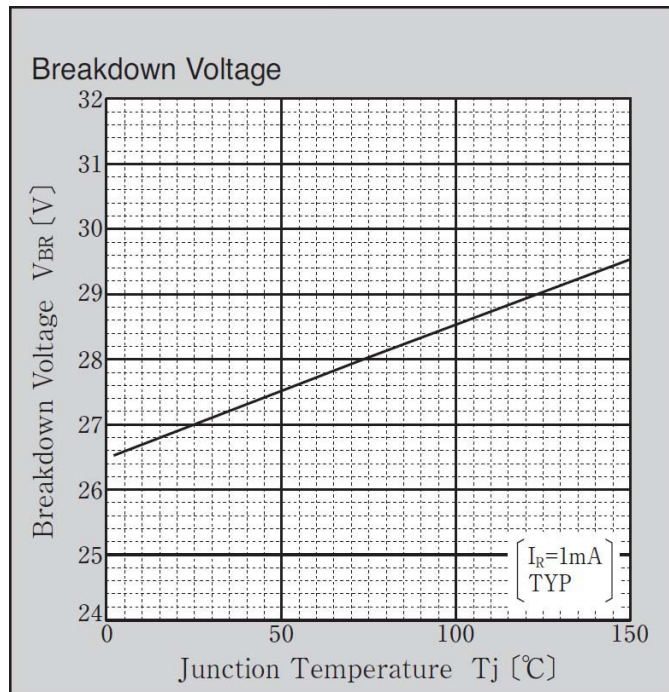
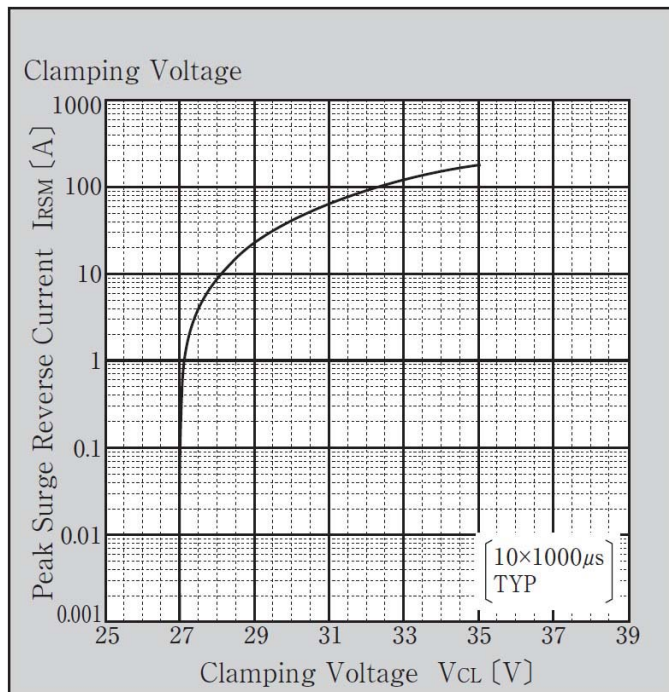
※ :See the original Specifications

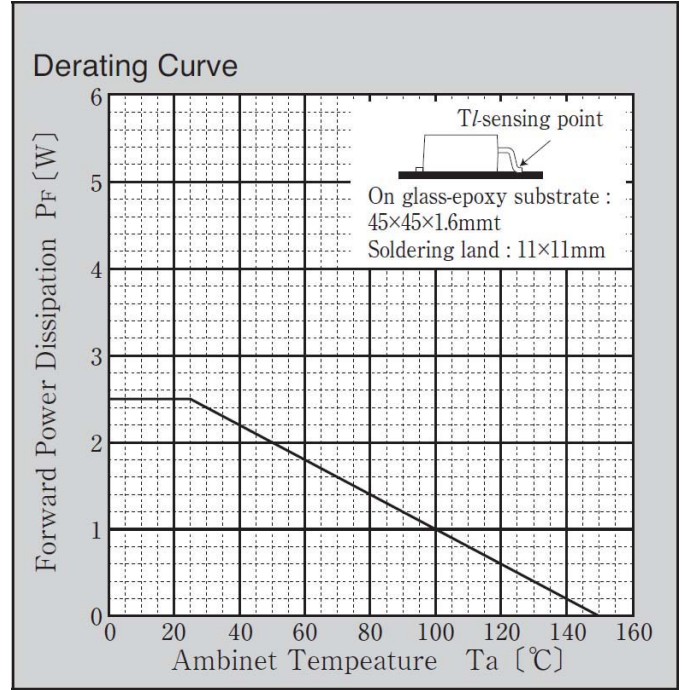
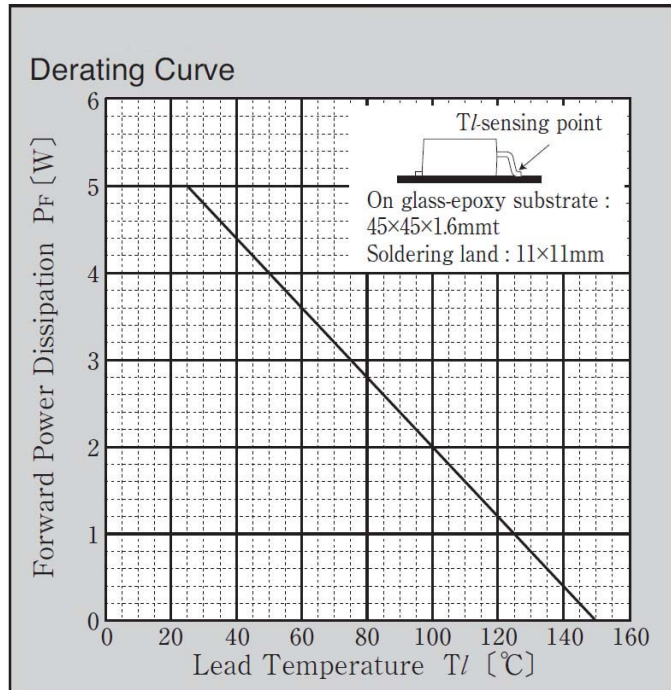
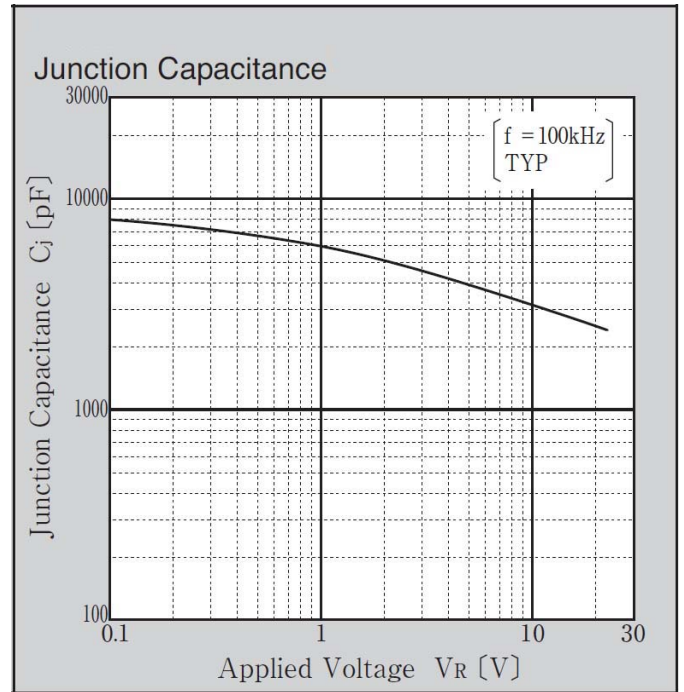
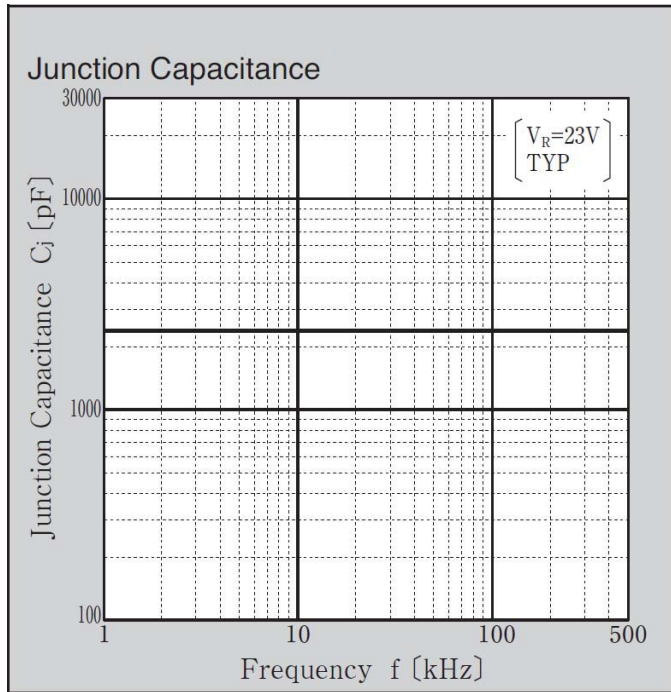
Electrical Characteristics (unless otherwise specified : Tc=25°C)

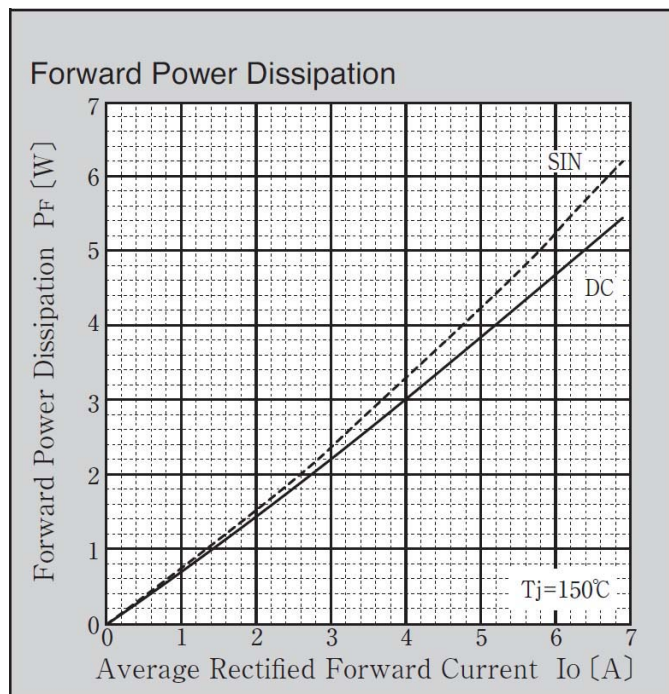
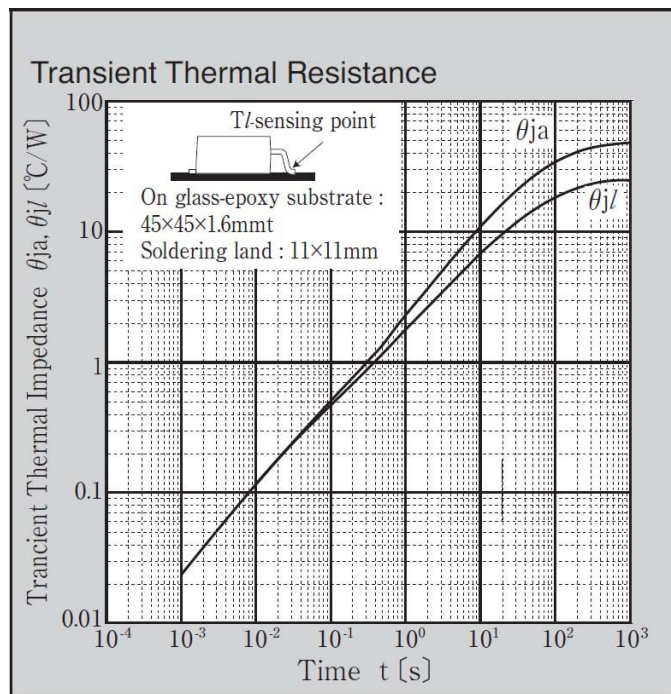
| Item | Symbol | Conditions | Ratings | | | Unit |
|-------------------------|-----------------|---------------------------|---------|-----|------|------|
| | | | MIN | TYP | MAX | |
| Breakdown voltage | V _{BR} | IR=1mA, Pulse measurement | 24.3 | 27 | 29.7 | V |
| Reverse current | I _R | VR=23V | | | 5 | μA |
| Forward voltage | V _F | IF=30A, Pulse Measurement | | | 1.3 | V |
| Restriction voltage | V _{CL} | 10/1000μs, Ipp=180A ※ | | | 40 | V |
| Temperature coefficient | rz | | | | 0.09 | %/°C |

※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

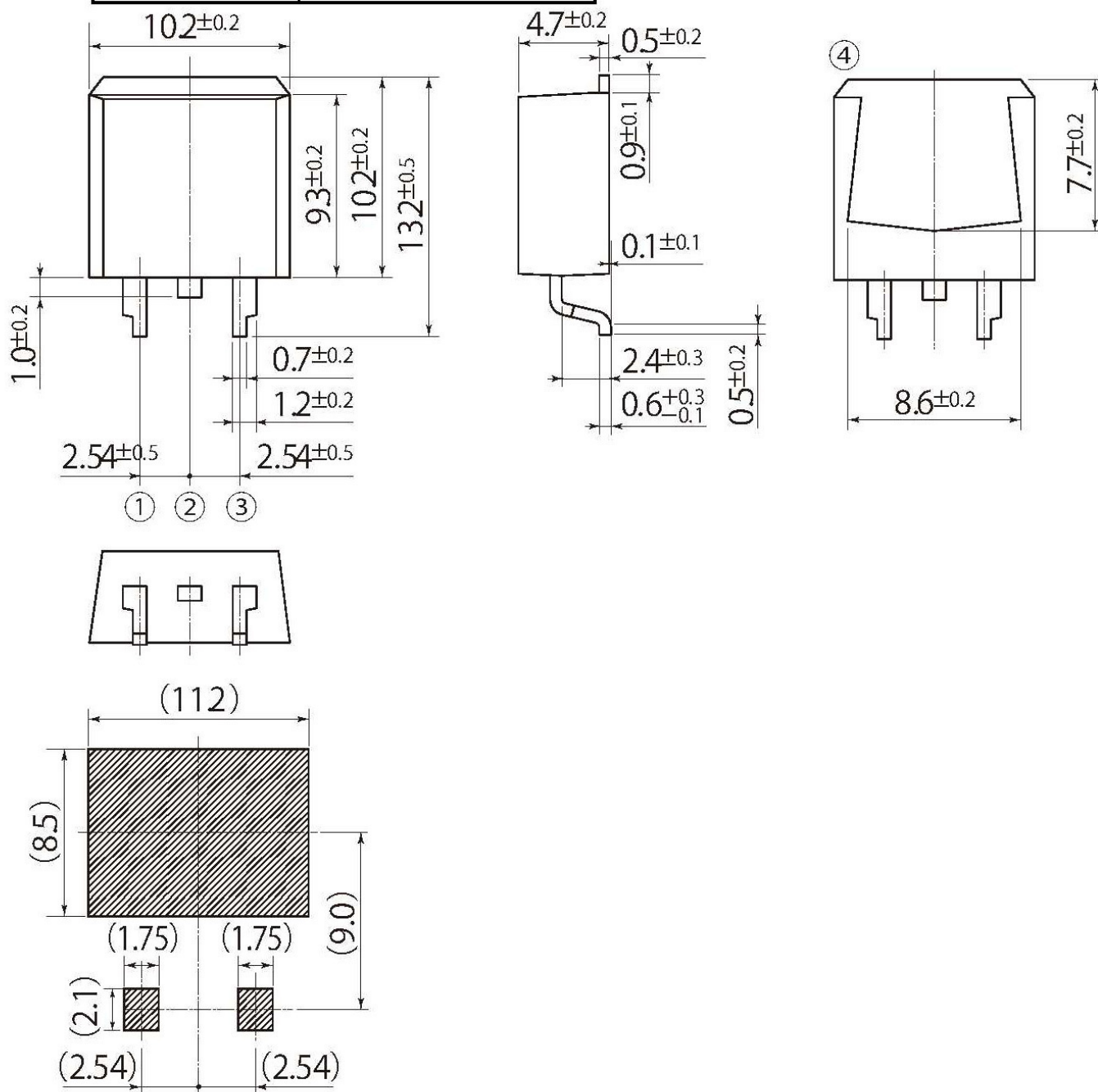






H1

| | |
|------------|---------------|
| JEDEC Code | — |
| JEITA Code | SC-83 similar |
| House Name | STO-220 |



Referential Soldering Pad

• Optimize soldering pad to the board design and soldering condition.

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