

ST04-16F1

TVS
15A, 400W

Feature

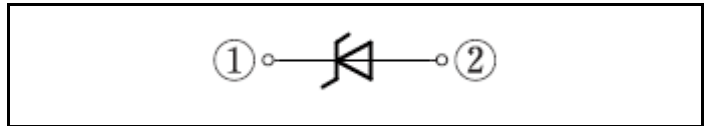
- Peak pulse power:400W
- Small SMD
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 1F
Package (JEDEC Code): DO-214AC



Equivalent circuit



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

| Item | Symbol | Conditions | Ratings | Unit |
|-------------------------------------|--------------------|-----------------------------|------------|------|
| Storage temperature | T _{stg} | | -55 to 175 | °C |
| Operating junction temperature | T _j | | -55 to 175 | °C |
| Maximum surge reverse current | I _{RSM} | 10/1000μs, Non-repetitive * | 15 | A |
| Maximum surge reverse power | P _{RSM} | 10/1000μs, Non-repetitive * | 400 | W |
| Continuous (direct) reverse voltage | V _{R(DC)} | | 13.6 | V |

* : See the original Specifications

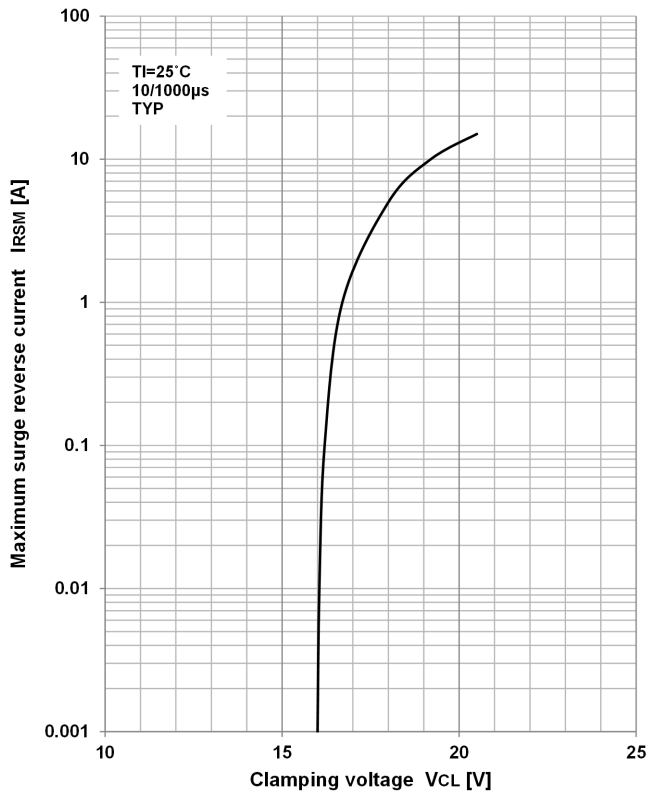
Electrical Characteristics (unless otherwise specified : Tl=25°C)

| Item | Symbol | Conditions | Ratings | | | Unit |
|------------------------------------|----------------------|---|---------|-----|------|------|
| | | | MIN | TYP | MAX | |
| Breakdown voltage | V _{BR} | I _R =1mA, Pulse measurement | 14.4 | | 17.6 | V |
| Reverse current | I _R | V _R =13.6V, Pulse measurement | | | 5 | μA |
| Electrostatic discharge capability | V _{ESD} | C=330pF, R=330Ω, Polarity±, Aerial discharge * | | 30 | | kV |
| Thermal resistance | R _{th(j-l)} | Junction to lead, On glass-epoxy substrate * | | | 23 | °C/W |
| Thermal resistance | R _{th(j-a)} | Junction to ambient, On glass-epoxy substrate * | | | 157 | °C/W |

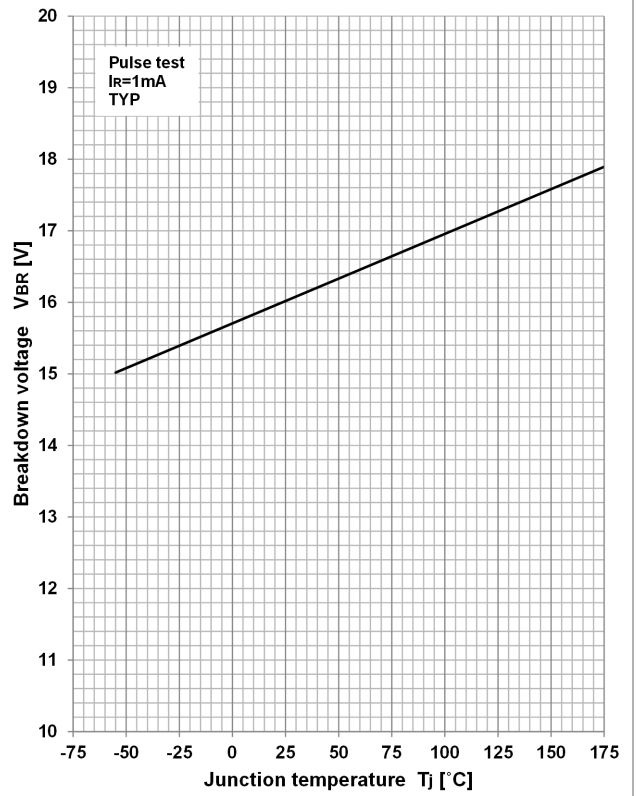
* : See the original Specifications

CHARACTERISTIC DIAGRAMS

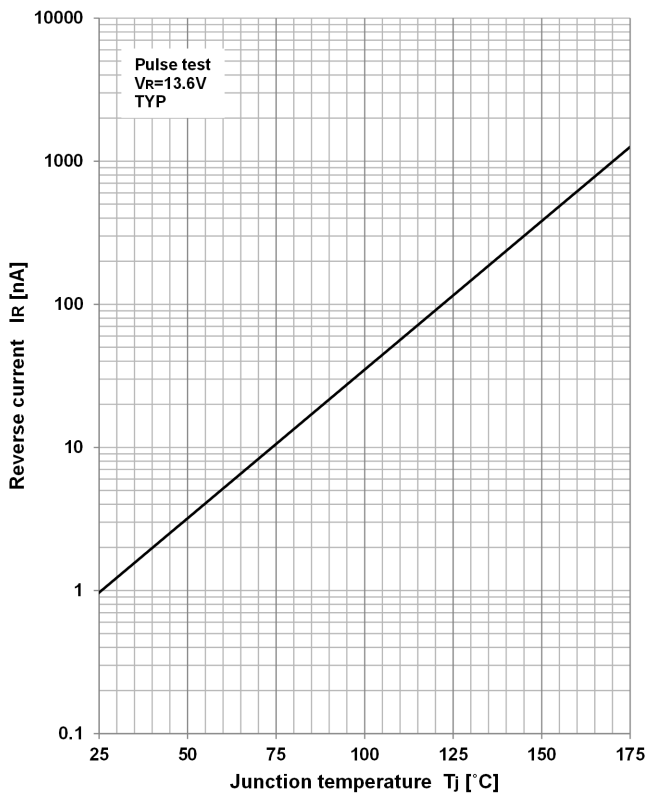
Maximum surge reverse current vs Clamping voltage



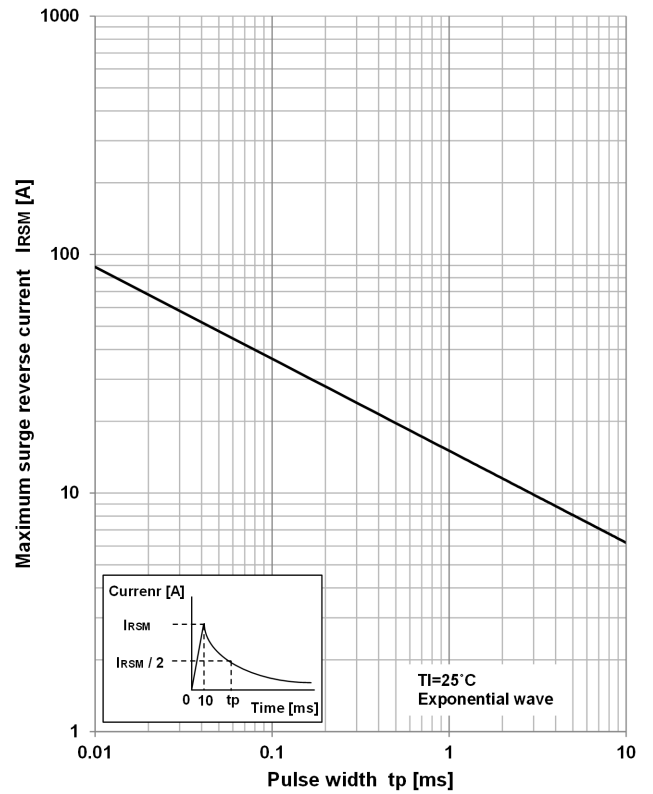
Breakdown voltage vs Junction temperature

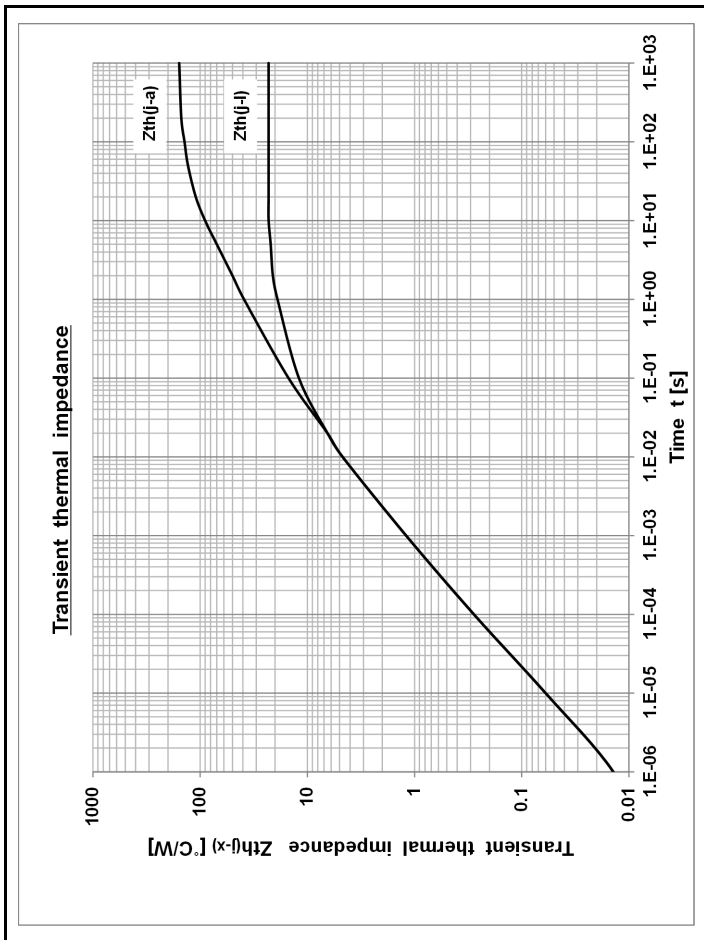
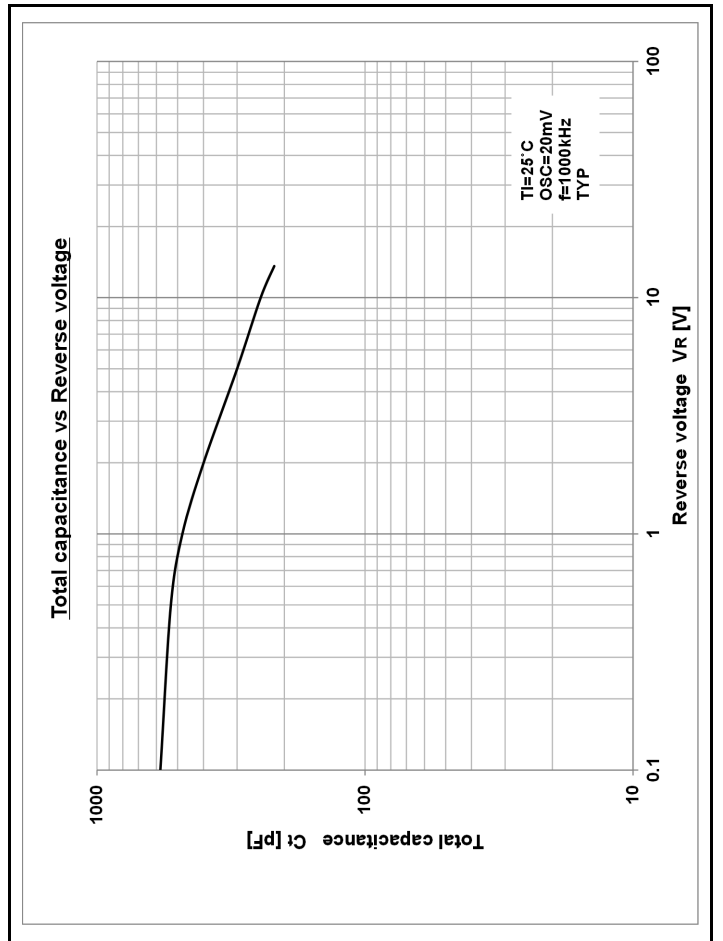
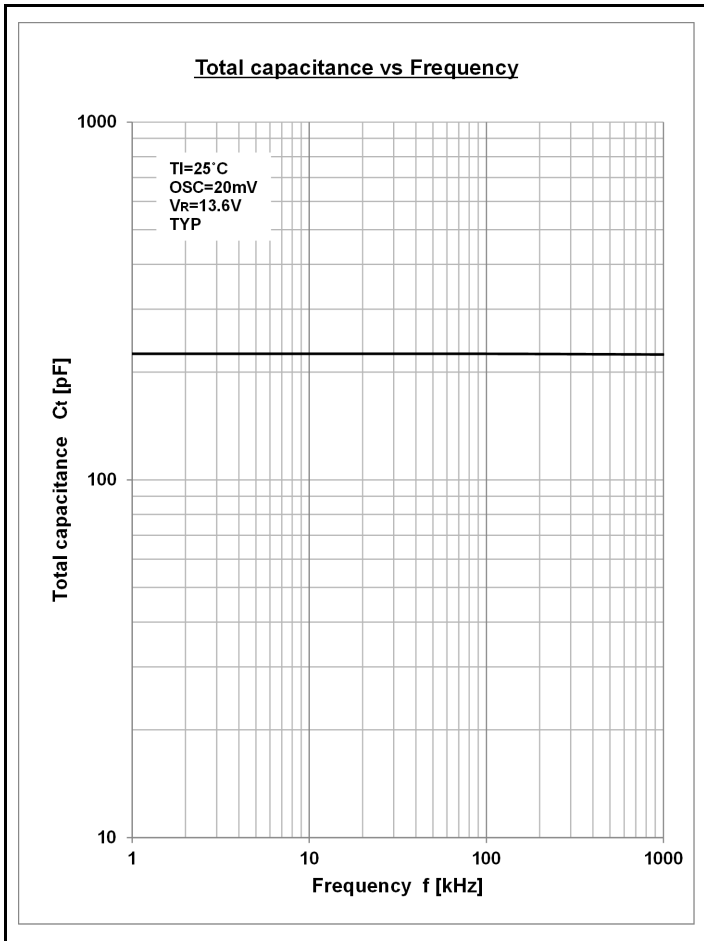


Reverse current vs Junction temperature



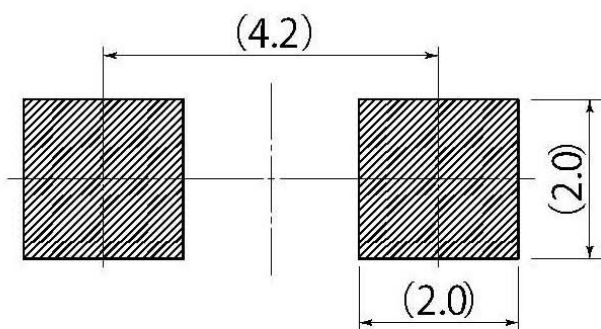
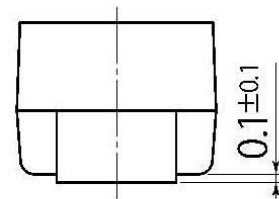
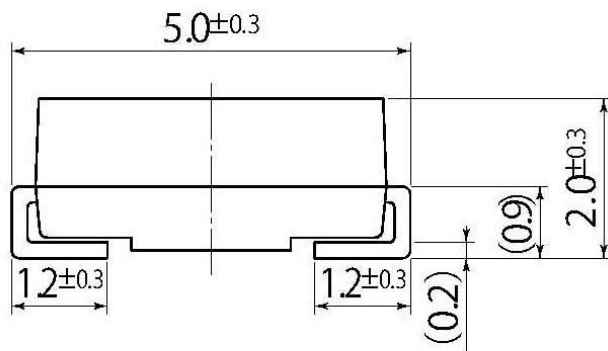
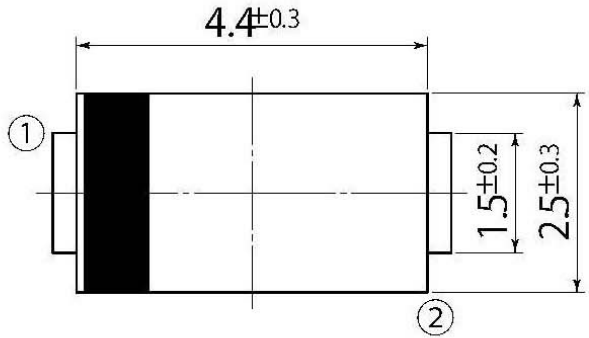
Maximum surge reverse current vs Pulse width





B3

| | |
|------------|----------|
| JEDEC Code | DO-214AC |
| JEITA Code | - |
| House Name | 1F, CF |



Referential Soldering Pad

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

Notes

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