

D45JCT120V

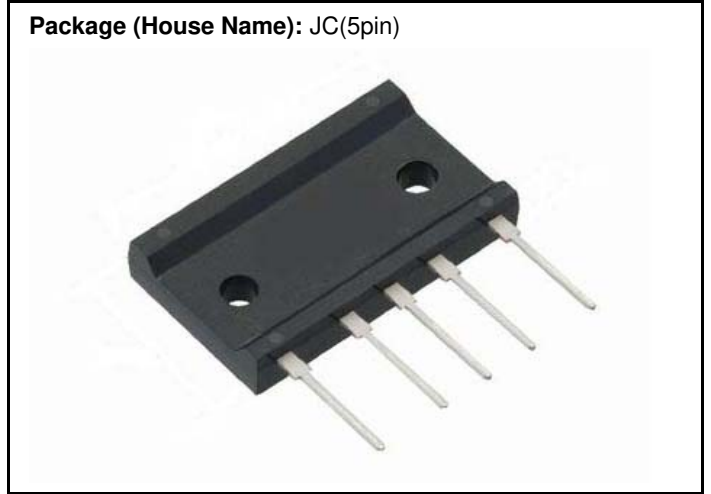
Bridge Diodes
1200V, 45A

Feature

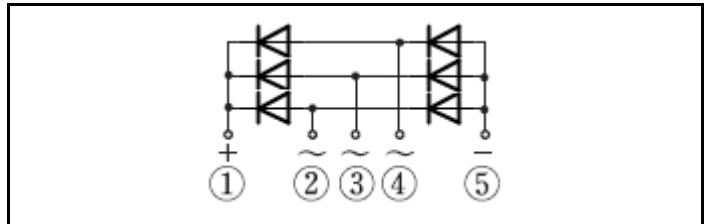
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): JC(5pin)



Equivalent circuit



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

| Item | Symbol | Conditions | Ratings | Unit |
|---------------------------------|------------------|--|------------|------------------|
| Storage temperature | Tstg | | -40 to 150 | °C |
| Junction temperature | Tj | | -40 to 150 | °C |
| Repetitive peak reverse voltage | VRRM | | 1200 | V |
| Average forward current | IF(AV) | 50Hz sine wave, Resistance load, With heatsink, Tc=99°C | 45 | A |
| Average forward current | IF(AV) | 50Hz sine wave, Resistance load, Without heatsink, Ta=25°C ※ | 4.6 | A |
| Surge forward current | IFSM | 50Hz sine wave, Non-repetitive 1 cycle peak value, per diode, Tj=25°C | 450 | A |
| Surge forward current | IFSM1 | tp=1ms, sine wave, Non-repetitive, peak value, per diode, Tj=25°C | 1423 | A |
| Current squared time | I ² t | 1ms ≤ t < 10ms, Tj=25°C, per diode | 1013 | A ² s |
| Dielectric strength | Vdis | Terminals to case, AC 1 minute, Except top (opposite side of the terminal side) of the mold case | 2.5 | kV |
| Mounting torque | TOR | (Recommended torque : 1.2N·m) | 1.5 | N·m |

※ :See the original Specifications

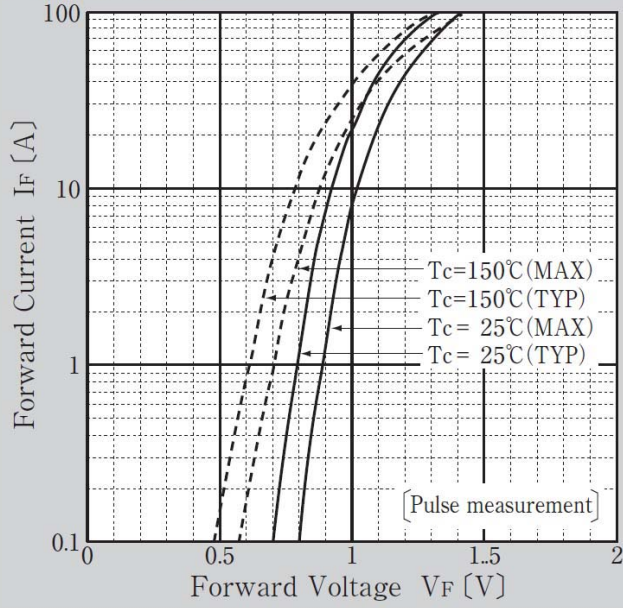
Electrical Characteristics (unless otherwise specified : Tc=25°C)

| Item | Symbol | Conditions | Ratings | | | Unit |
|--------------------|----------------------|---|---------|-----|------|------|
| | | | MIN | TYP | MAX | |
| Forward voltage | V _F | I _F =15A, Pulse measurement, per diode | | | 1.05 | V |
| Reverse current | I _R | V _R =1200V, Pulse measurement, per diode | | | 10 | μA |
| Thermal resistance | R _{th(j-c)} | Junction to case ,With heatsink | | | 0.5 | °C/W |
| Thermal resistance | R _{th(j-a)} | Junction to ambient, On glass-epoxy substrate ※ | | | 16 | °C/W |

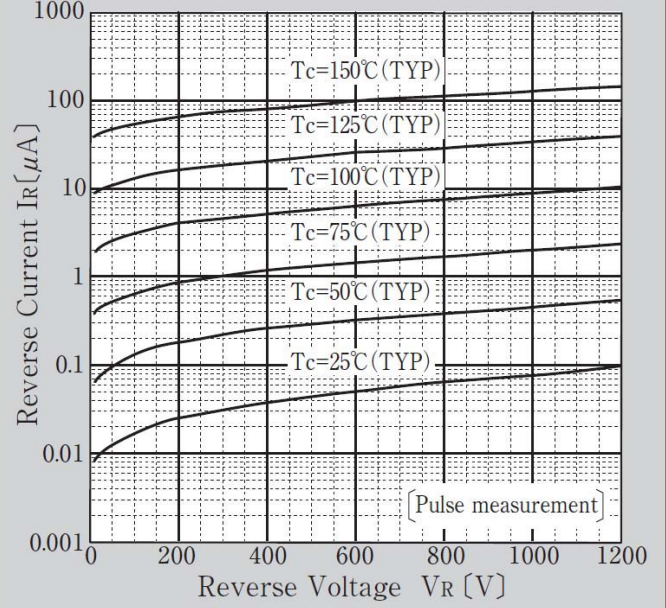
※ : See the original Specifications

CHARACTERISTIC DIAGRAMS

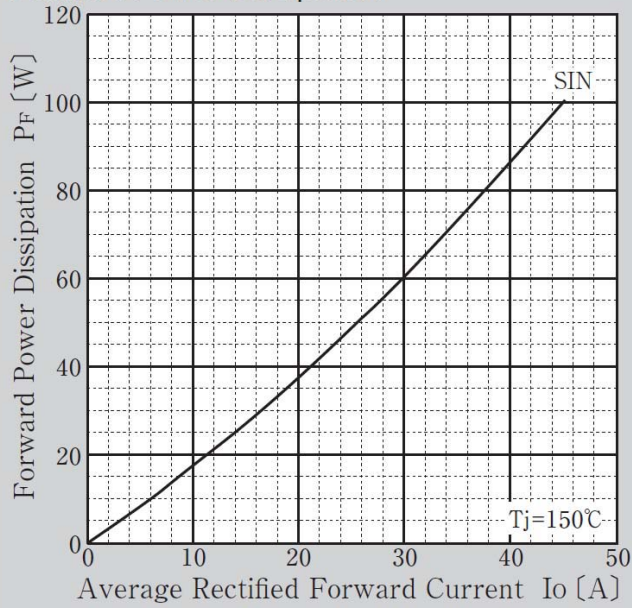
Forward Voltage



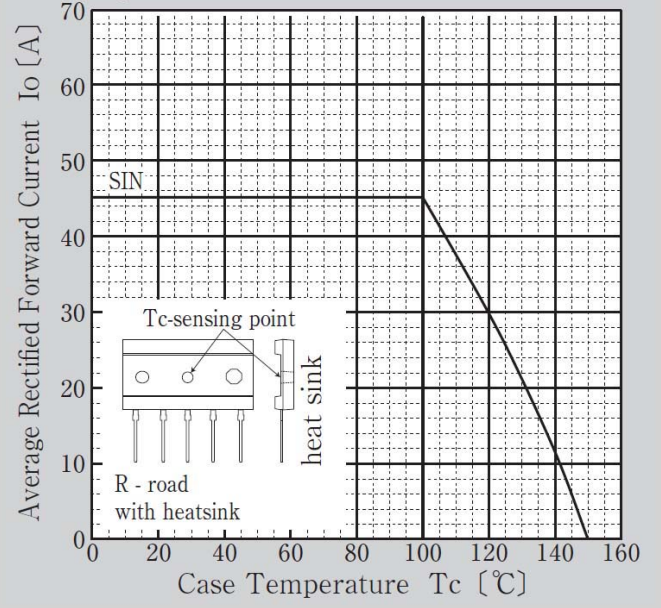
Reverse Current

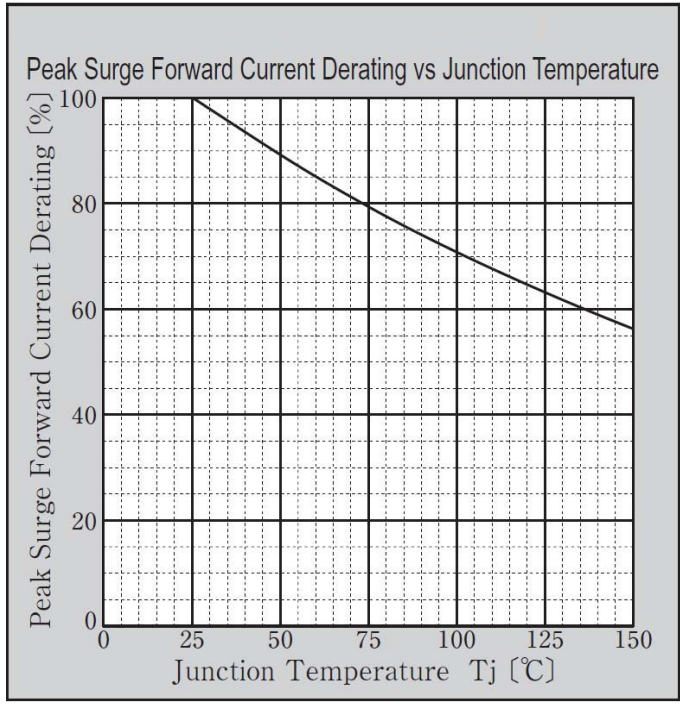
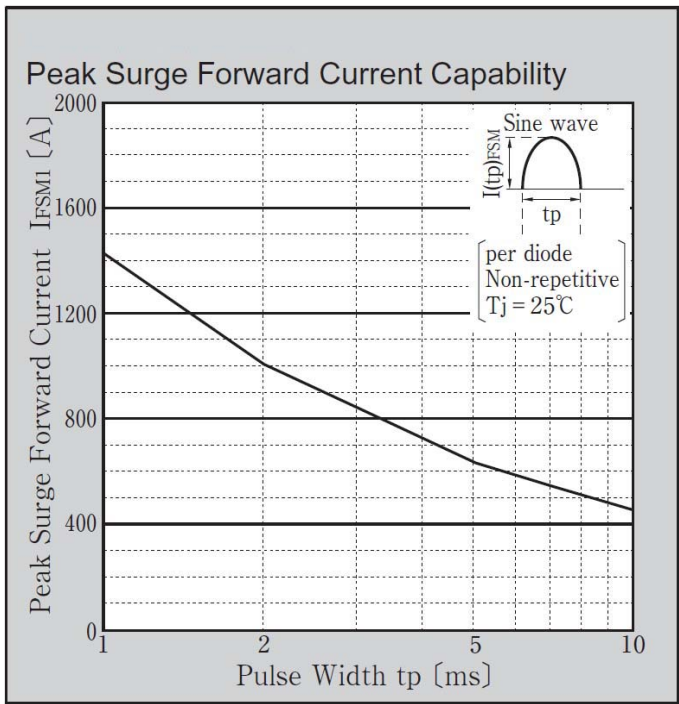
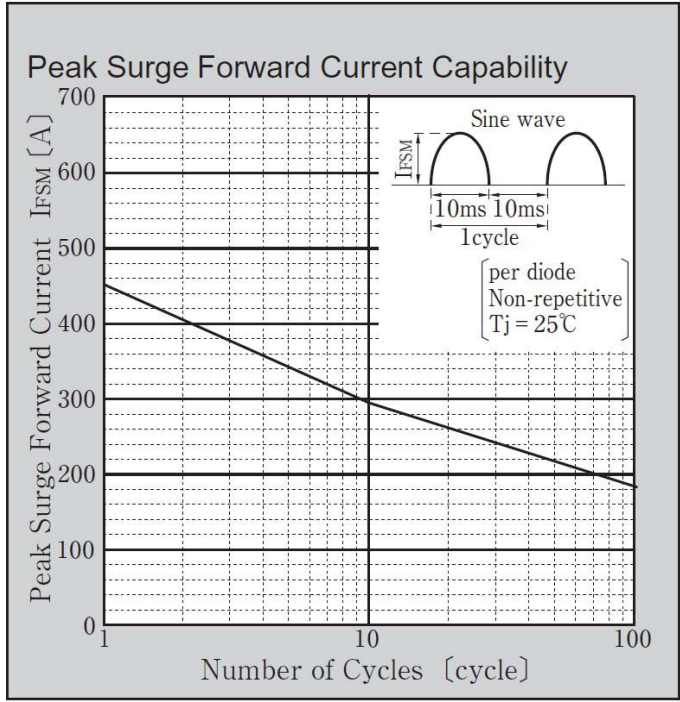
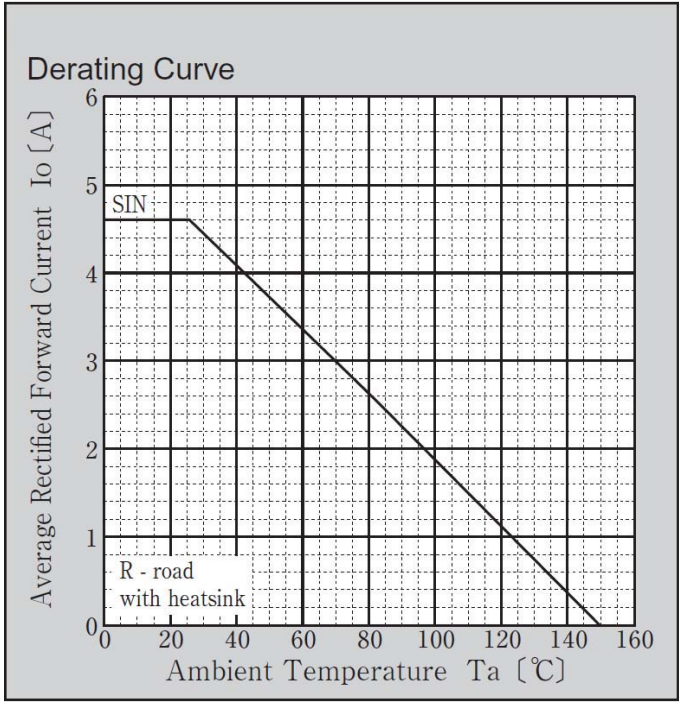


Forward Power Dissipation

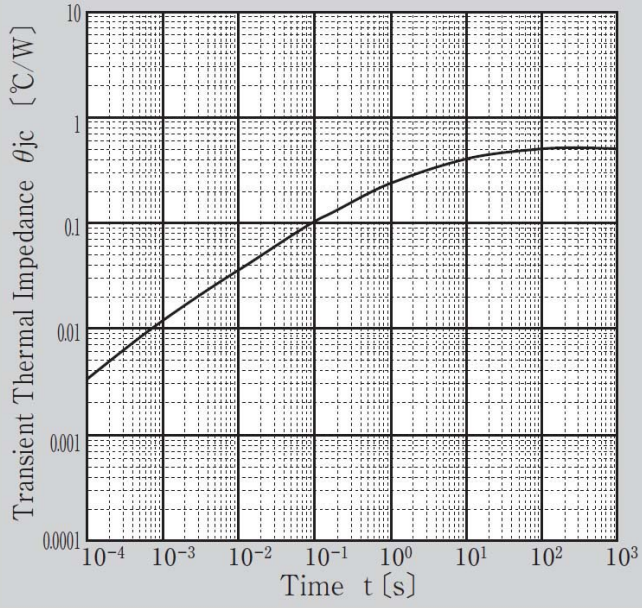


Derating Curve





Transient Thermal Impedance



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