

SHINDENGEN

Schottky Rectifiers (SBD)

Dual

D25SC6M

60V 25A

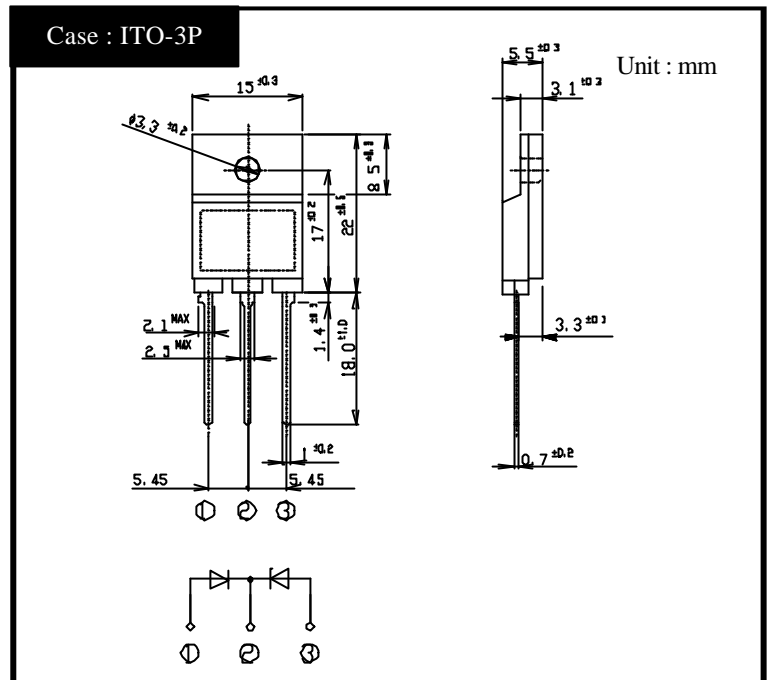
FEATURES

- Tj150
- P_{RRSM} avalanche guaranteed
- High current capacity
- Fully Isolated Molding

APPLICATION

- Switching power supply
- DC/DC converter
- Home Appliances, Office Equipment
- Telecommunication

OUTLINE DIMENSIONS



RATINGS

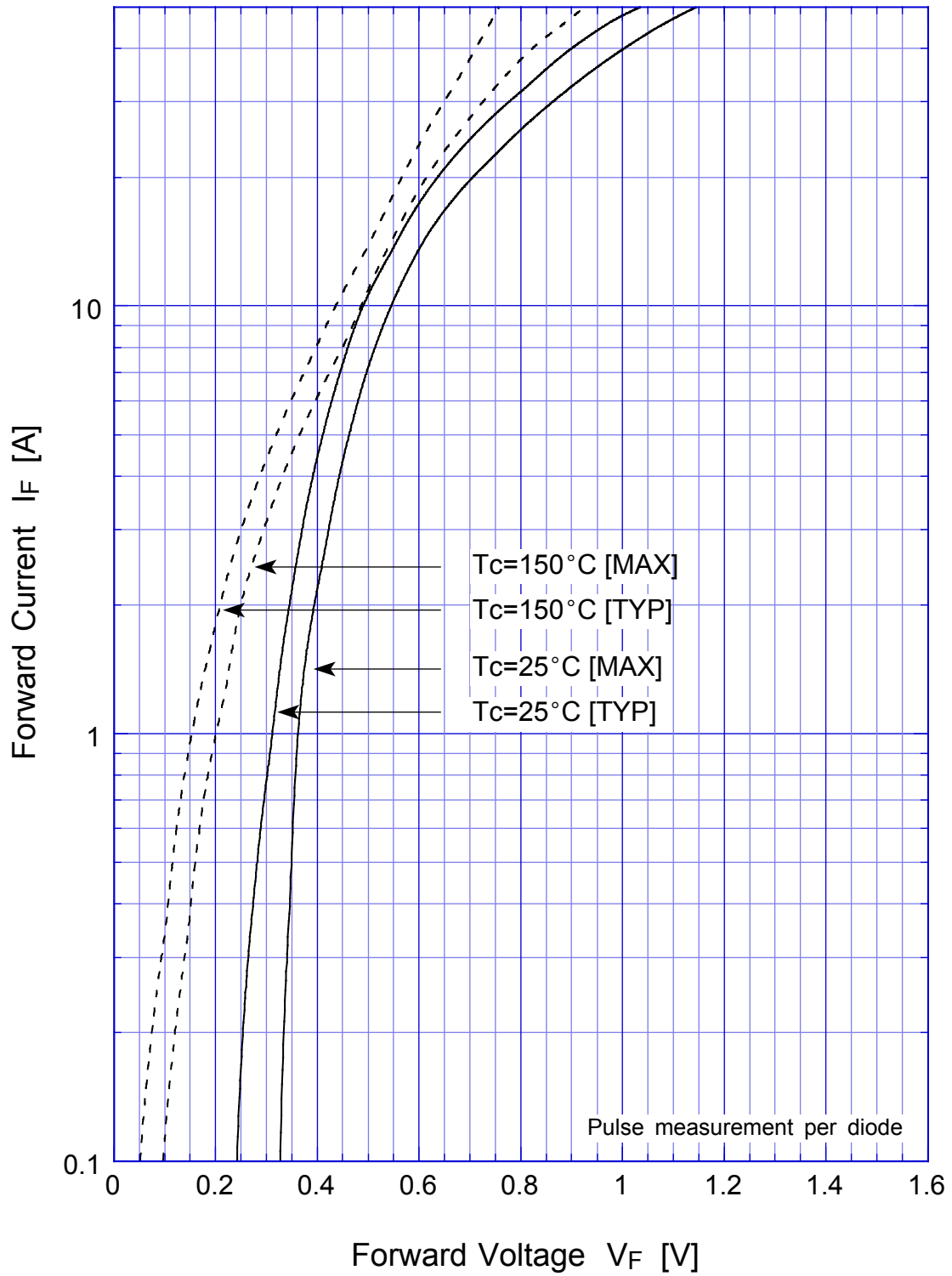
Absolute Maximum Ratings (If not specified Tc=25)

| Item | Symbol | Conditions | Ratings | Unit |
|---------------------------------------|-------------------|---|-----------|------|
| Storage Temperature | T _{stg} | | -40 ~ 150 | |
| Operating Junction Temperature | T _j | | 150 | |
| Maximum Reverse Voltage | V _{RM} | | 60 | V |
| Repetitive Peak Surge Reverse Voltage | V _{RRSM} | Pulse width 0.5ms, duty 1/40 | 65 | V |
| Average Rectified Forward Current | I _o | 50Hz sine wave, R-load, Rating for each diode I _o /2, Tc=117 | 25 | A |
| Peak Surge Forward Current | I _{FSM} | 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125 | 300 | A |
| Repetitive Peak Surge Reverse Power | P _{RRSM} | Pulse width 10 μ s, Rating of per diode, Tj=25 | 660 | W |
| Dielectric Strength | V _{dis} | Terminals to case, AC 1 minute | 1.5 | kV |
| Mounting Torque | TOR | (Recommended torque 0.5N·m) | 0.8 | N·m |

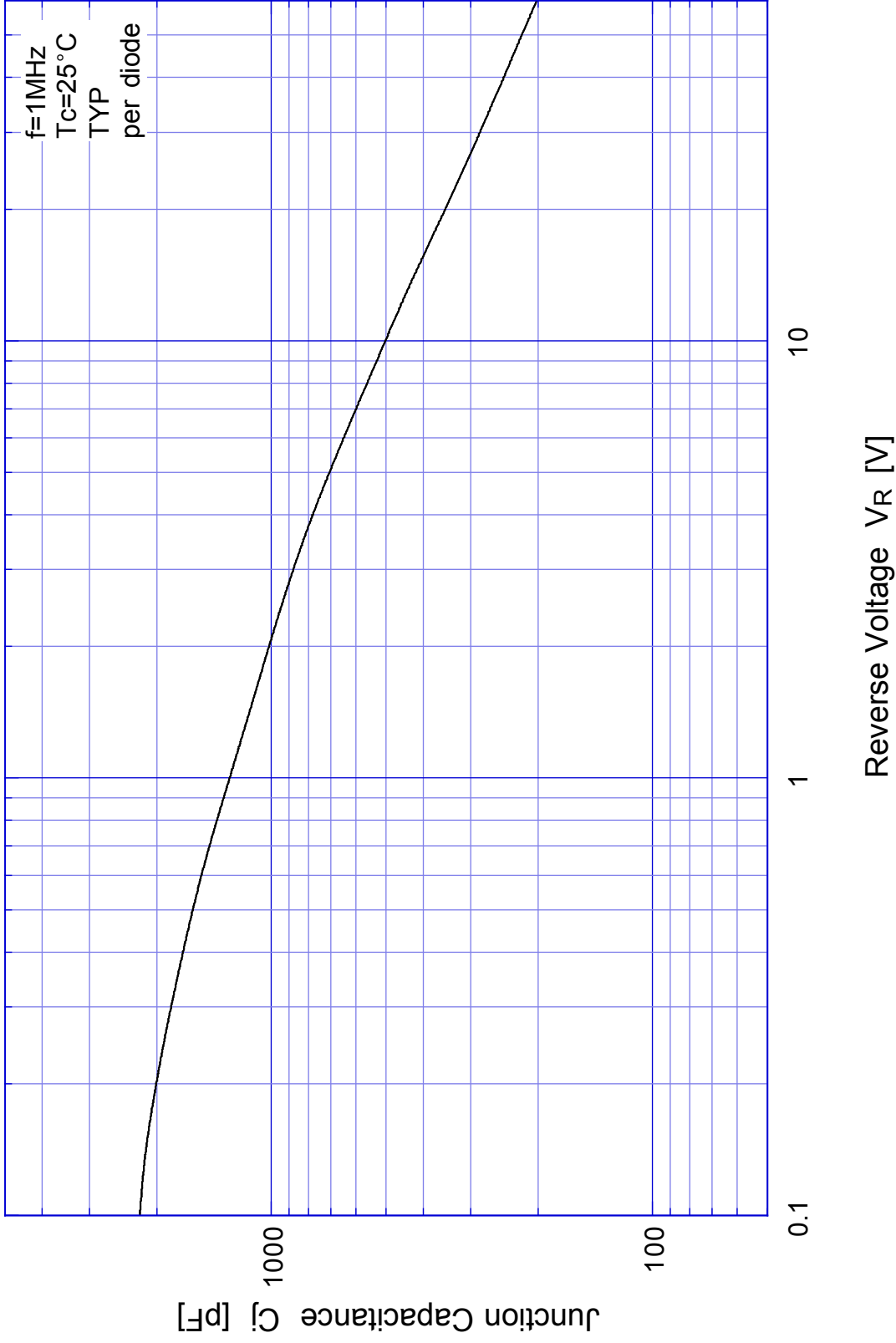
Electrical Characteristics (If not specified Tc=25)

| Item | Symbol | Conditions | Ratings | Unit |
|----------------------|----------------|--|----------|------|
| Forward Voltage | V _F | I _F =12.5A, Pulse measurement, Rating of per diode | Max.0.58 | V |
| Reverse Current | I _R | V _R =V _{RM} , Pulse measurement, Rating of per diode | Max. 10 | mA |
| Junction Capacitance | C _j | f=1MHz, V _R =10V, Rating of per diode | Typ.490 | pF |
| Thermal Resistance | θ _c | junction to case | Max.1.5 | /W |

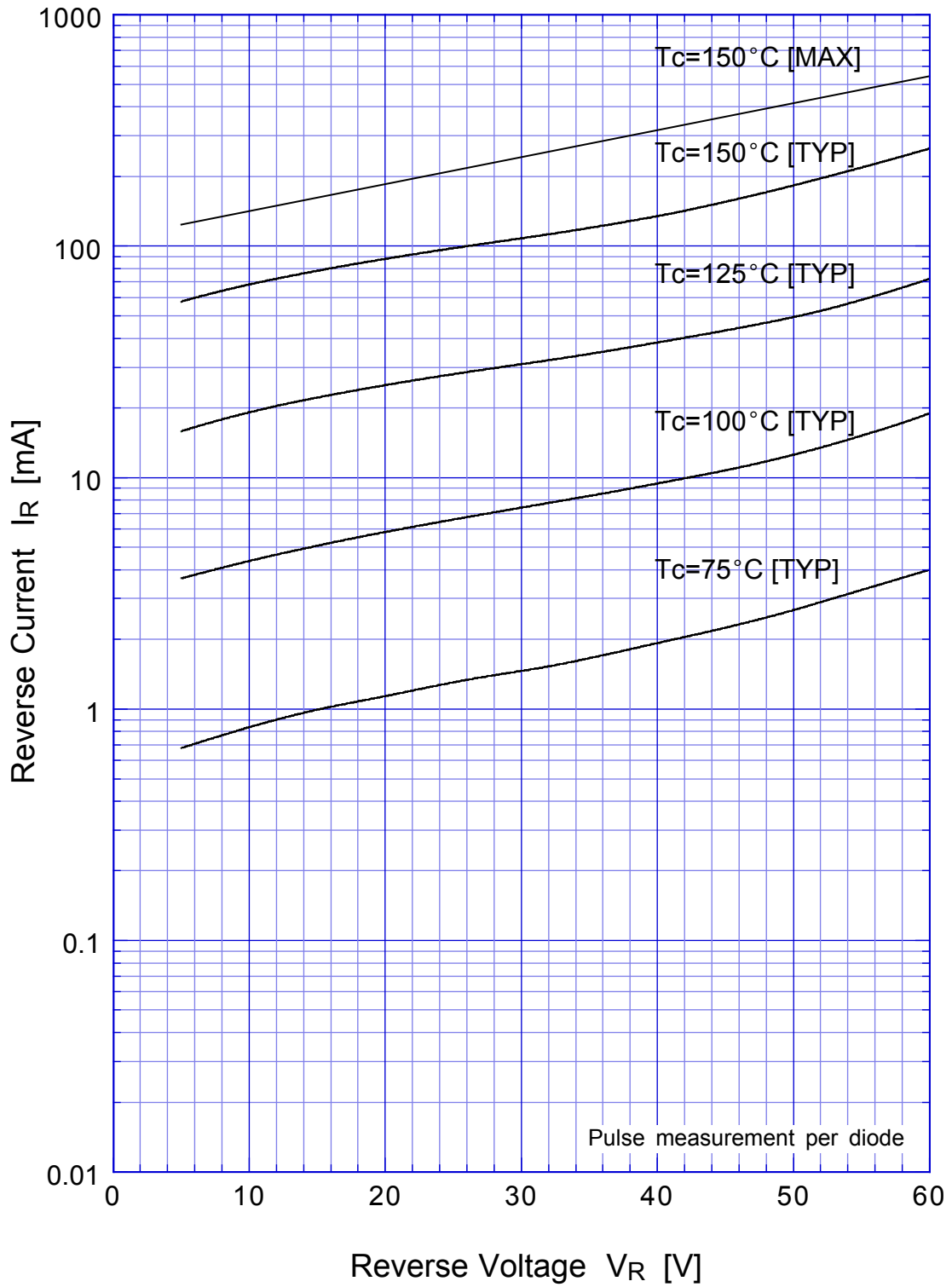
D25SC6M Forward Voltage



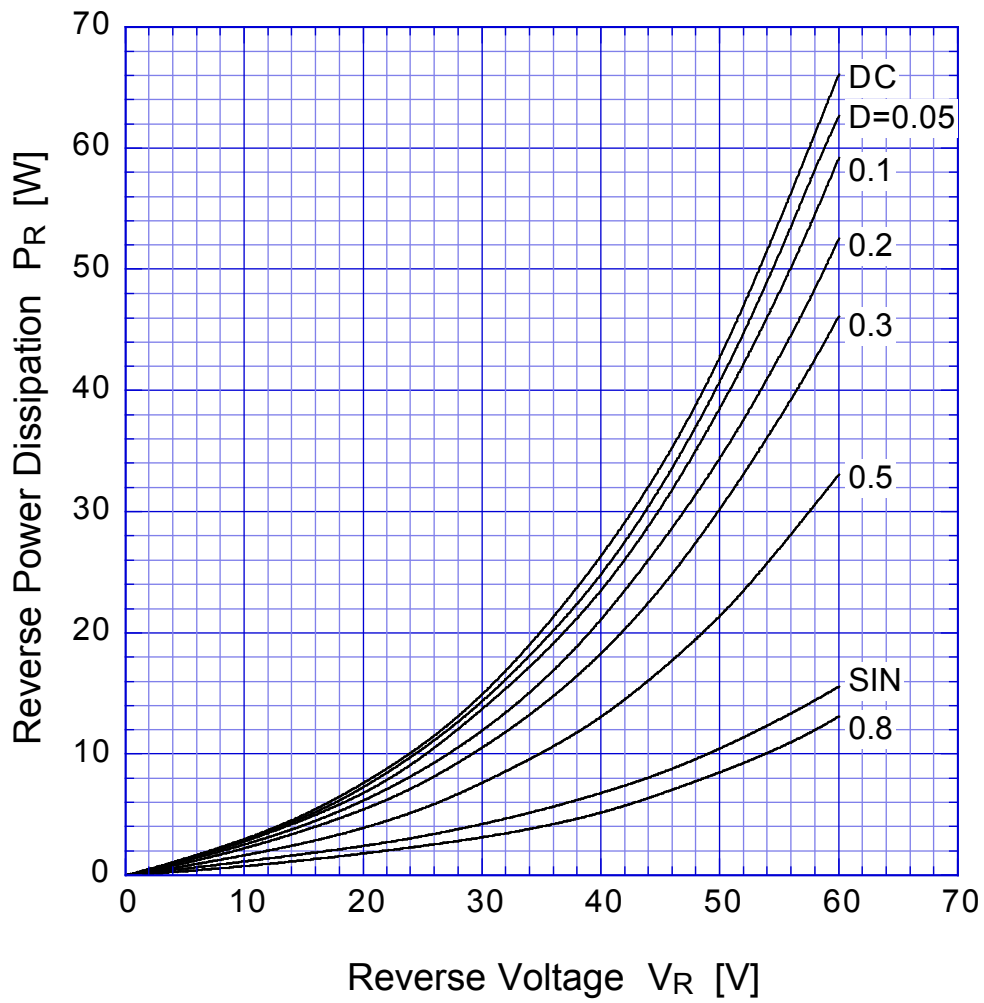
D25SC6M Junction Capacitance



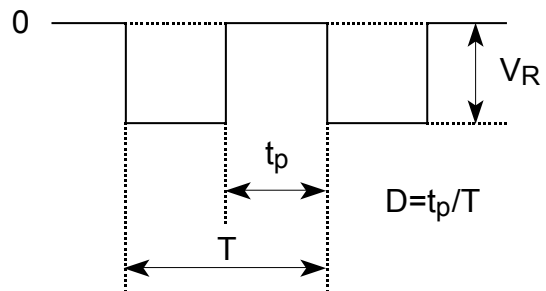
D25SC6M Reverse Current



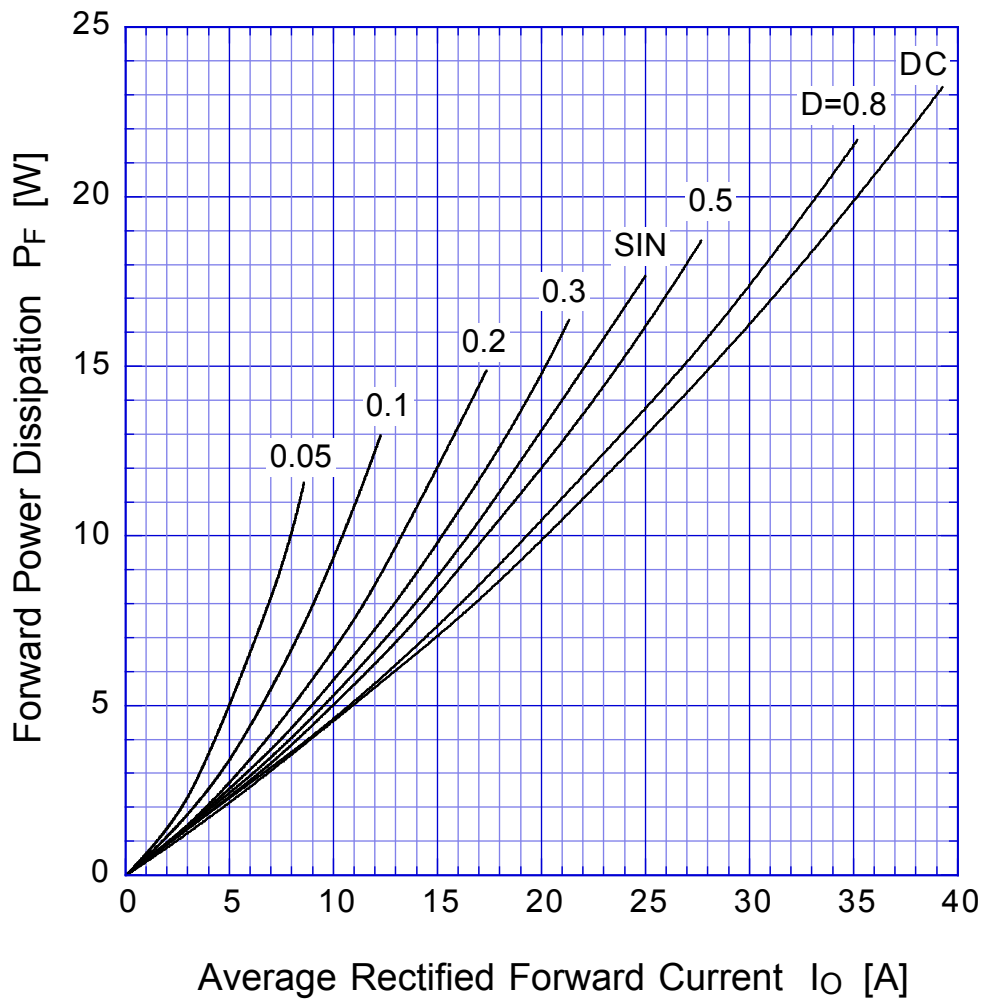
D25SC6M Reverse Power Dissipation



$T_j = 150^\circ\text{C}$



D25SC6M Forward Power Dissipation

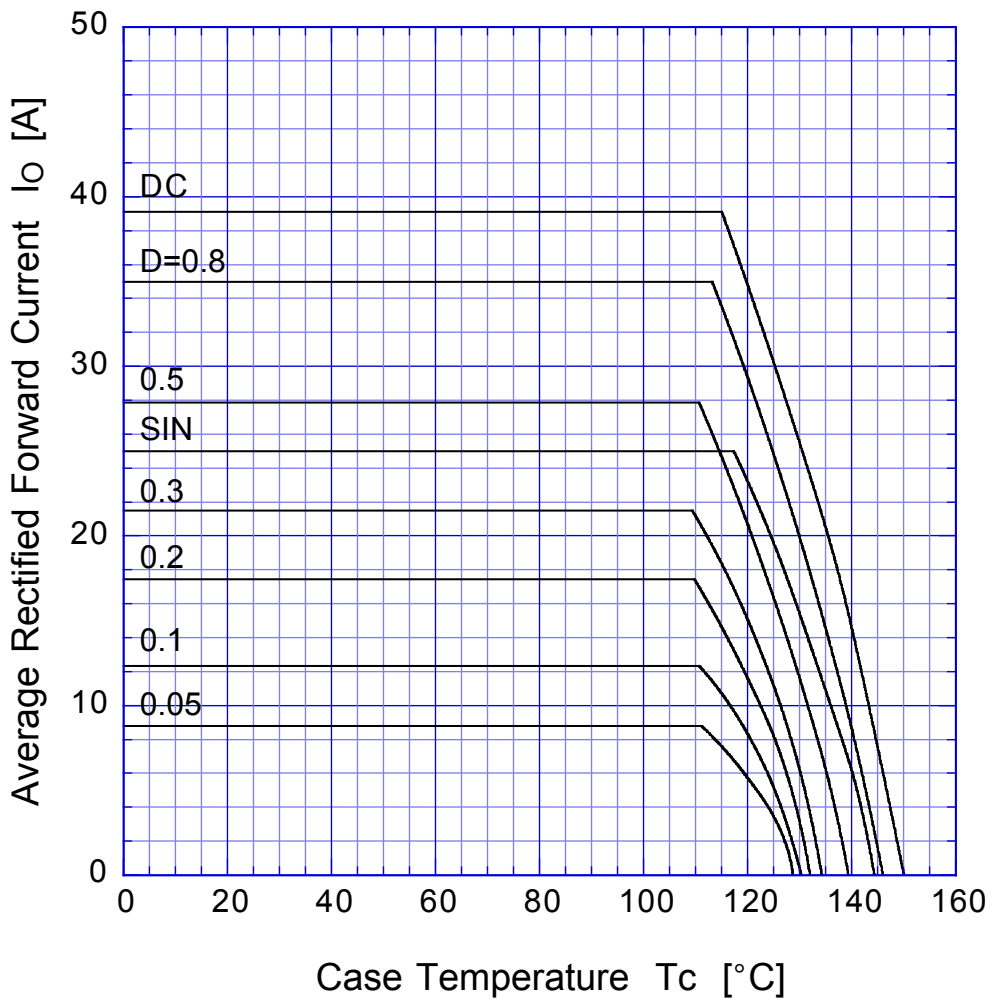


$T_j = 150^\circ\text{C}$



D25SC6M

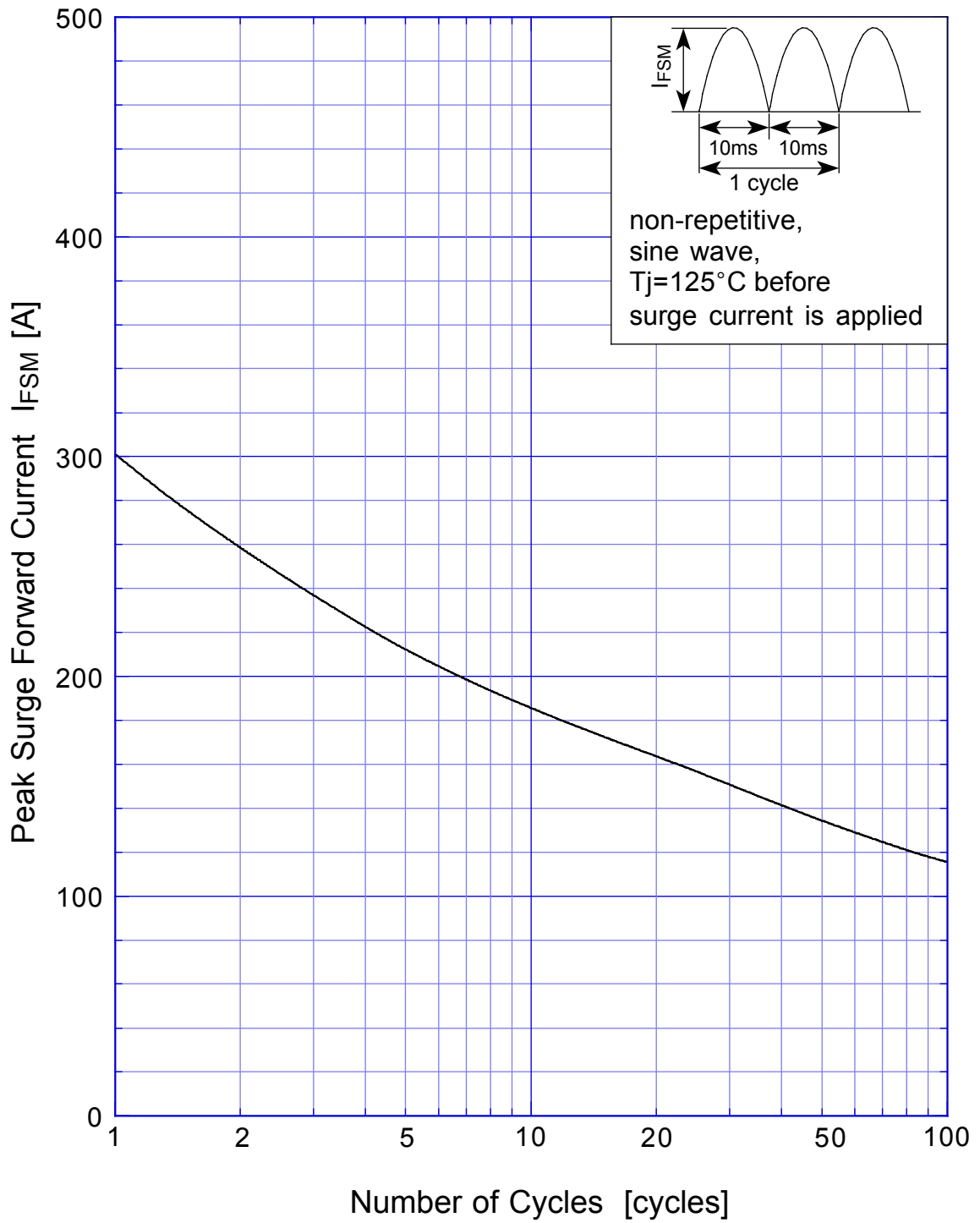
Derating Curve



$V_R = 30V$



D25SC6M Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



SBD

Repetitive Surge Reverse Power Capability

