

SHINDENGEN

Super Fast Recovery Rectifiers

Single

D3L60

600V 3A

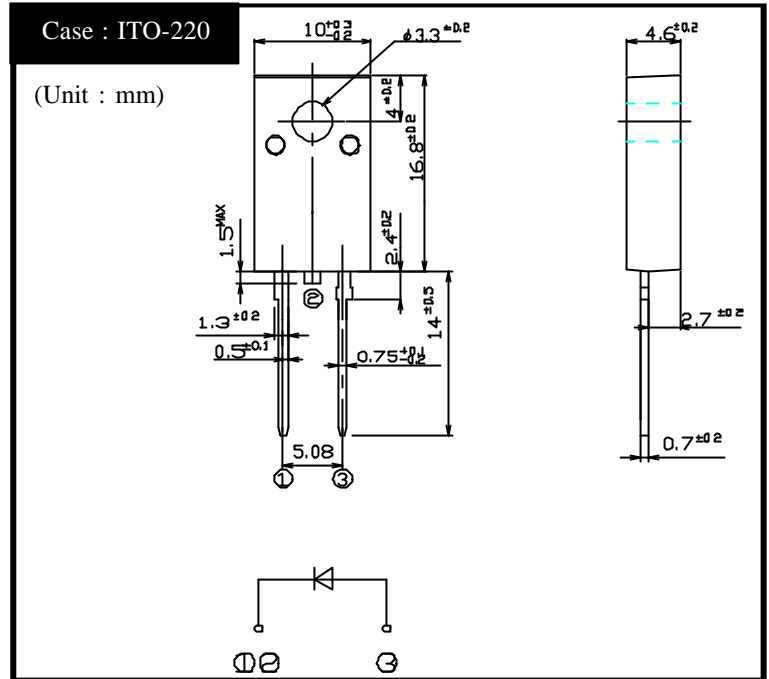
FEATURES

- High Voltage
- trr50ns
- Fully Isolated Molding
- Dielectric strength 1.5kV guaranteed

APPLICATION

- PFC
- Switching power supply
- Free Wheel
- CTV+B output, lighting

OUTLINE DIMENSIONS



RATINGS

Absolute Maximum Ratings (If not specified Tc=25)

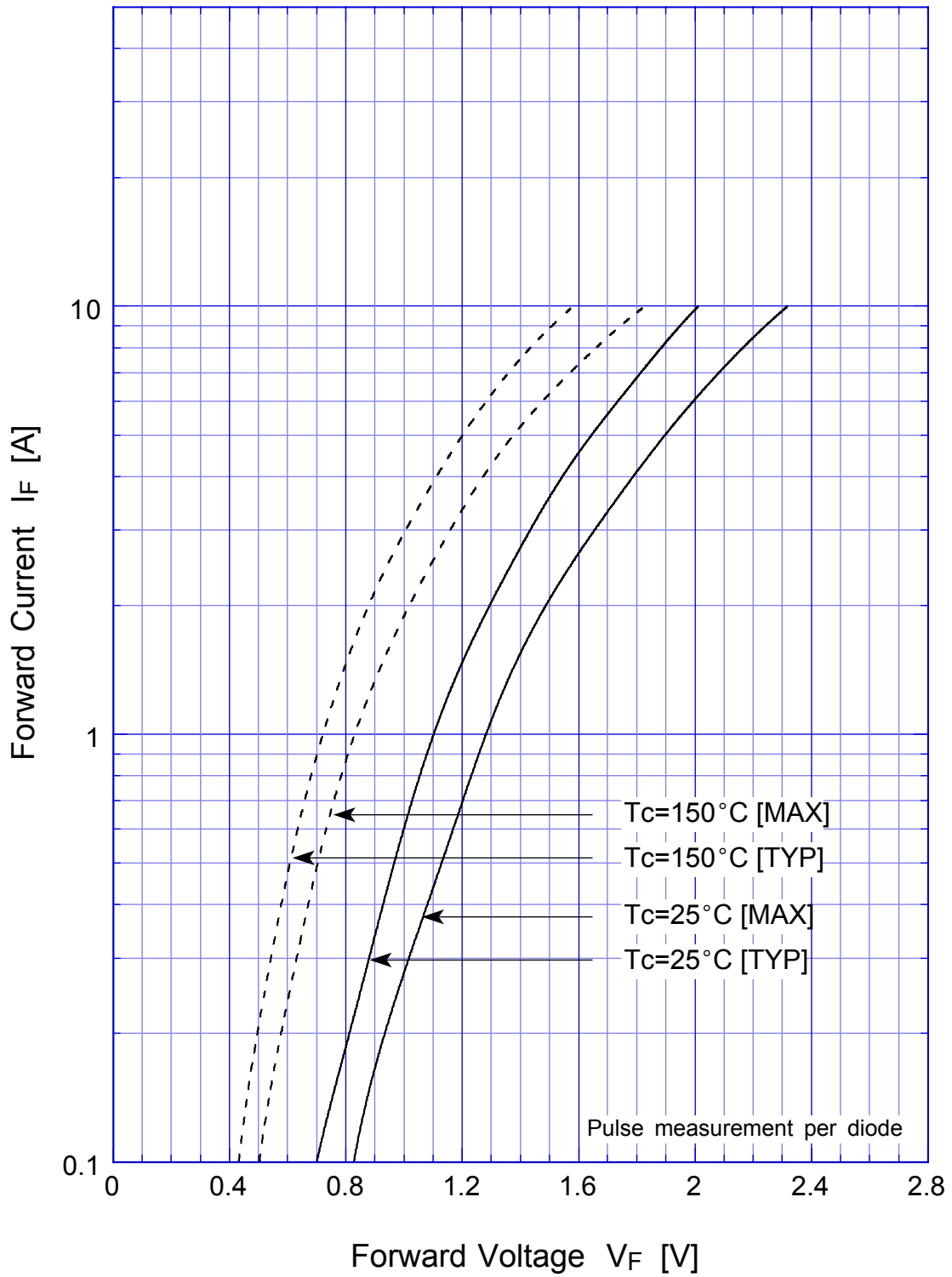
| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------------------|------------------|--|-----------|------|
| Storage Temperature | Tstg | | -55 ~ 150 | |
| Operating Junction Temperature | Tj | | 150 | |
| Maximum Reverse Voltage | V _{RM} | | 600 | V |
| Average Rectified Forward Current | I _O | 50Hz sine wave, R-load, Tc=127 | 3 | A |
| Peak Surge Forward Current | I _{FSM} | 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25 | 60 | A |
| Dielectric Strength | V _{dis} | Terminals to case, AC 1 minute | 1.5 | kV |
| Mounting Torque | TOR | (Recommended torque :0.3N·m) | 0.5 | N·m |

Electrical Characteristics (If not specified Tc=25)

| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------|-----------------|---|----------|------|
| Forward Voltage | V _F | I _F =3A, Pulse measurement | Max.1.65 | V |
| Reverse Current | I _R | V _R =V _{RM} , Pulse measurement | Max.10 | μA |
| Reverse Recovery Time | t _{rr} | I _F =0.5A, I _R =1A | Max.50 | ns |
| Thermal Resistance | j _c | junction to case | Max.4.5 | /W |
| | j _f | junction to heat-sink | Max.6 | |
| | j _a | junction to ambient | Max.55 | |

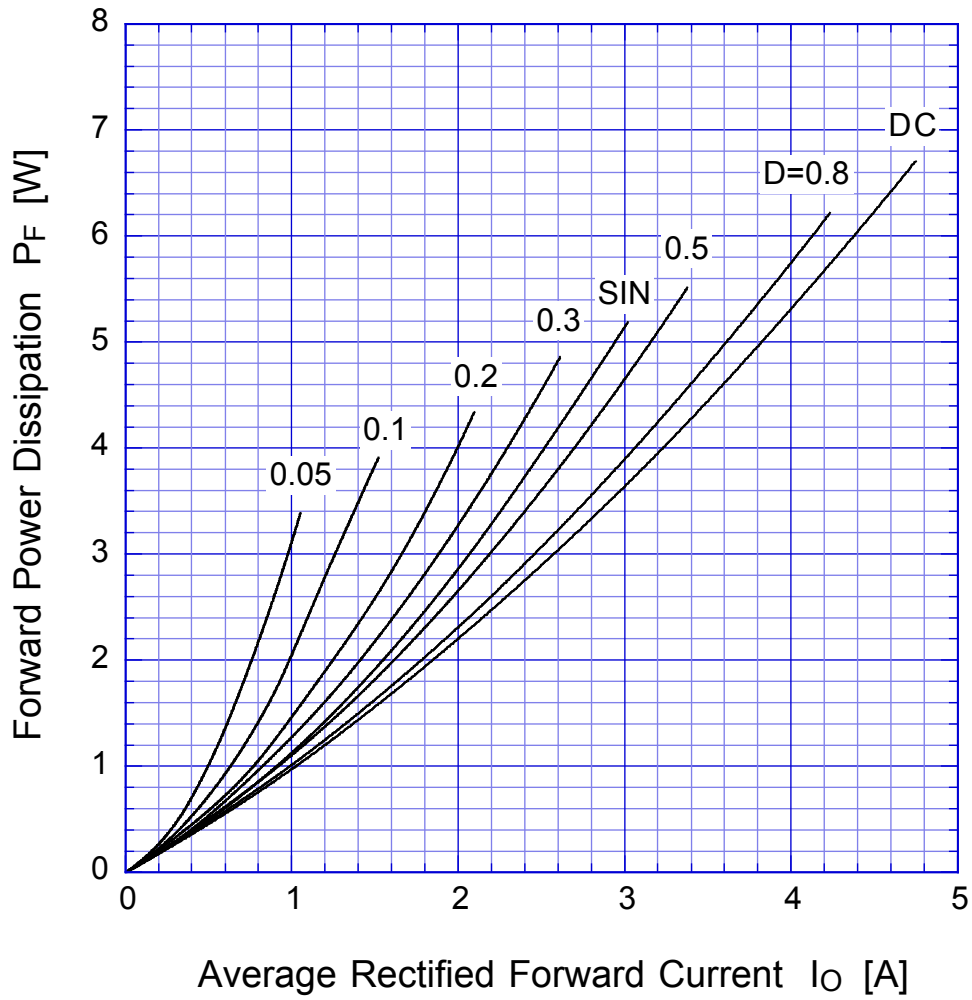
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Forward Voltage

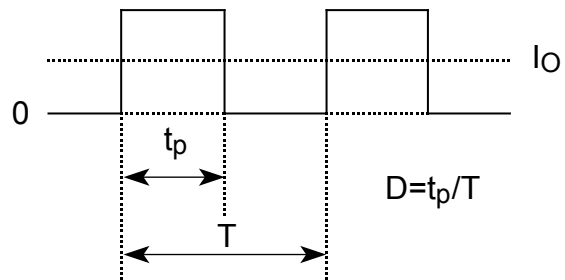


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Forward Power Dissipation

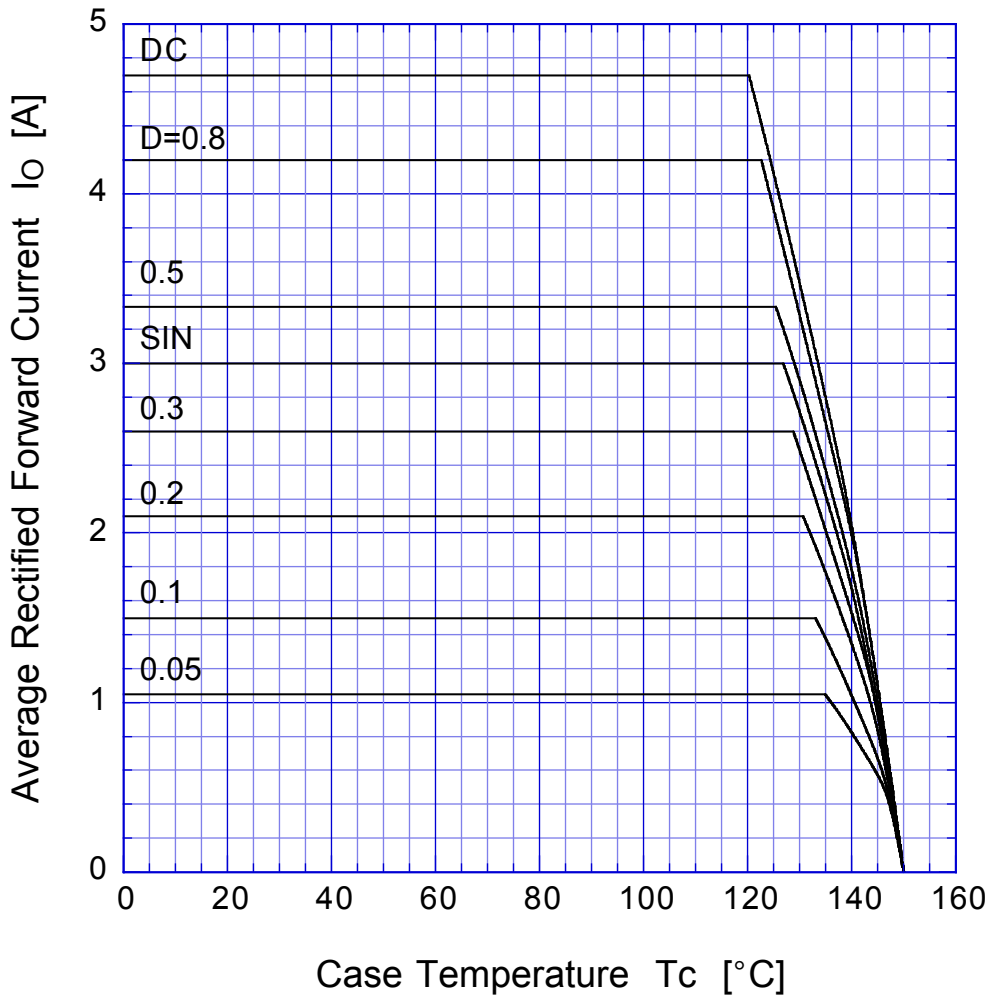


$T_j = T_{jmax}$

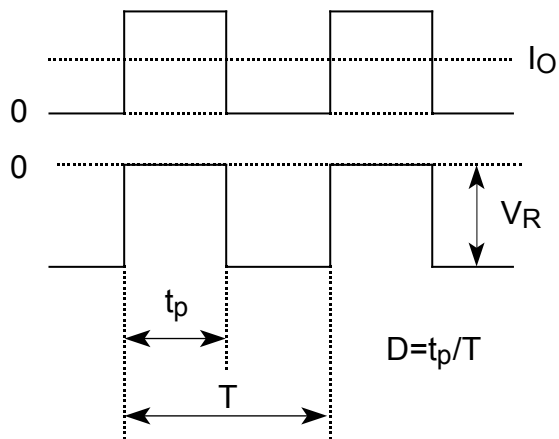


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Derating Curve

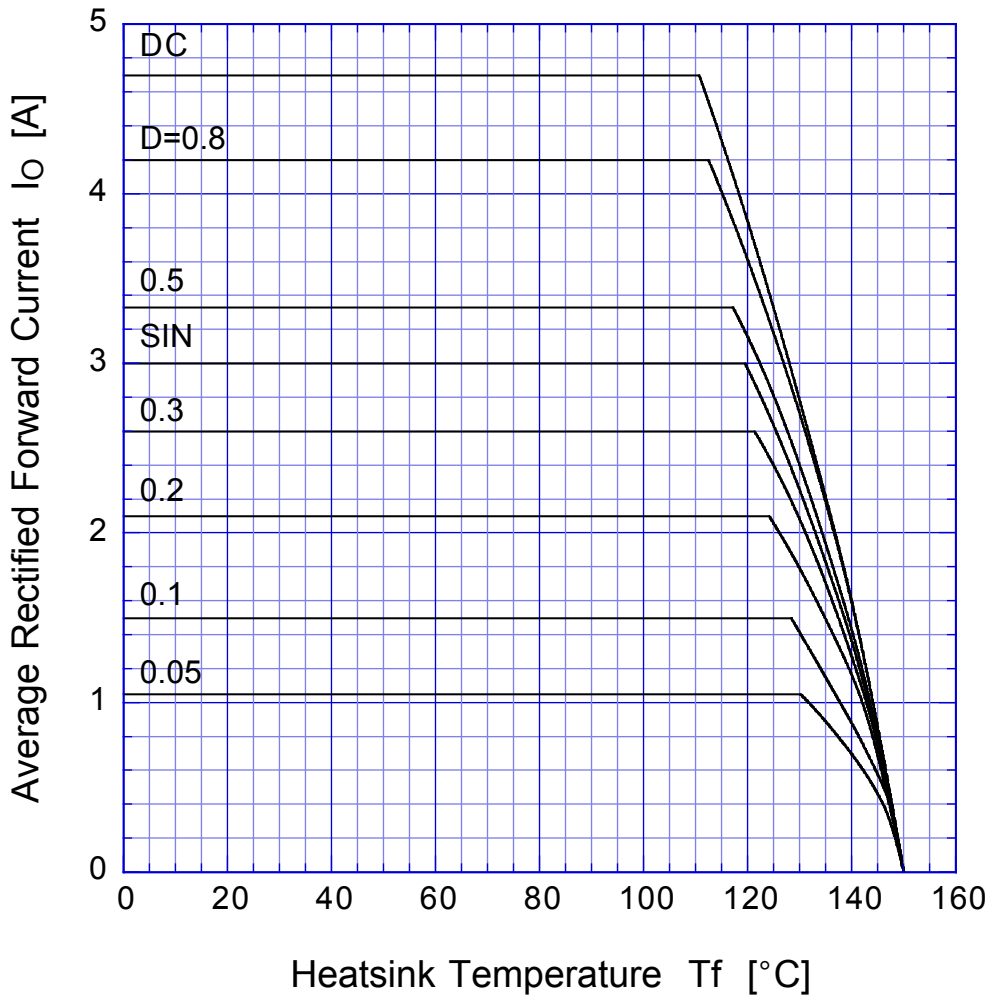


$$V_R = V_{RM}$$

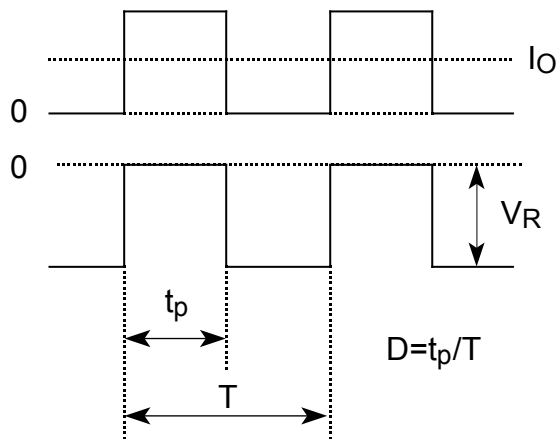


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Derating Curve

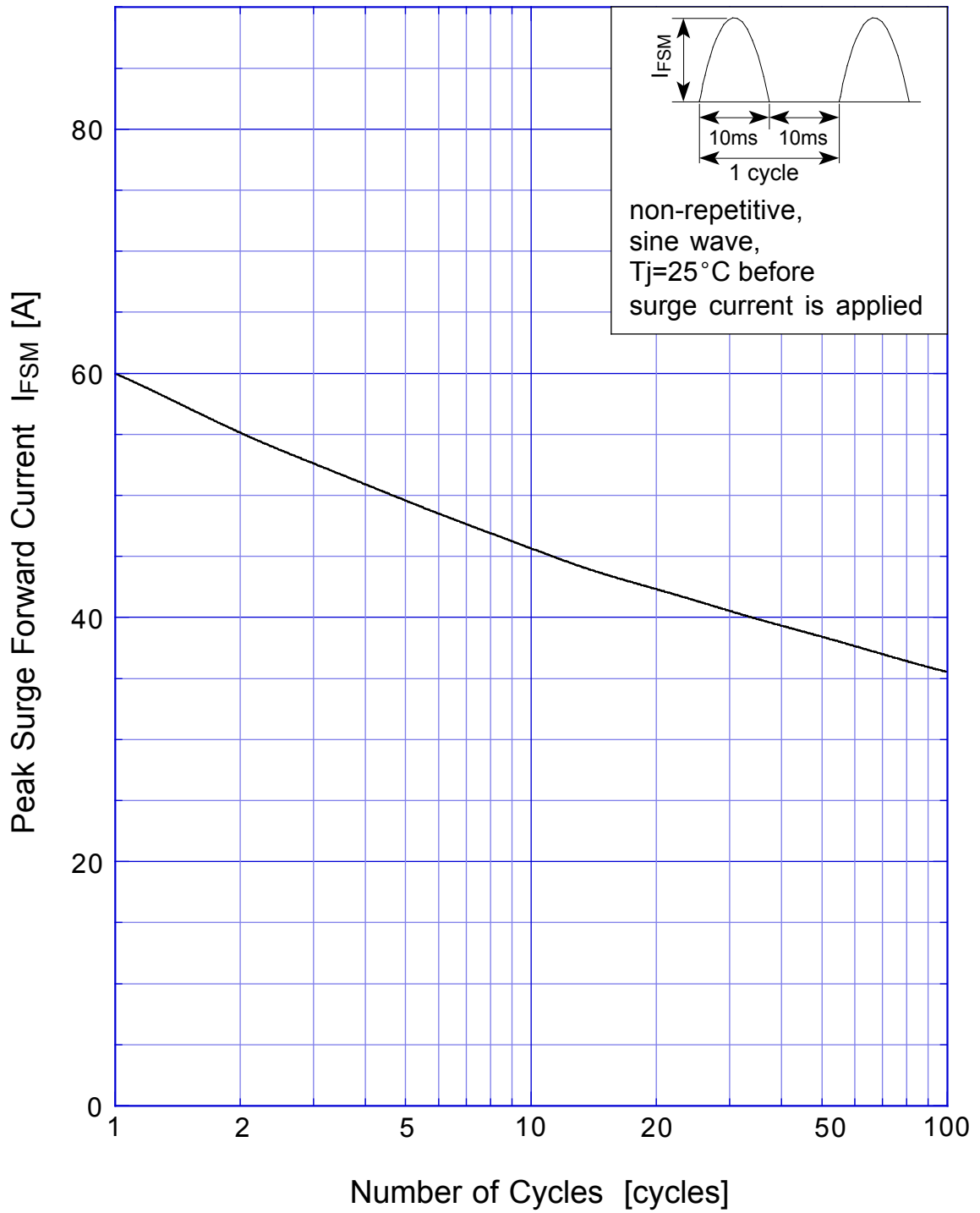


$$V_R = V_{RM}$$



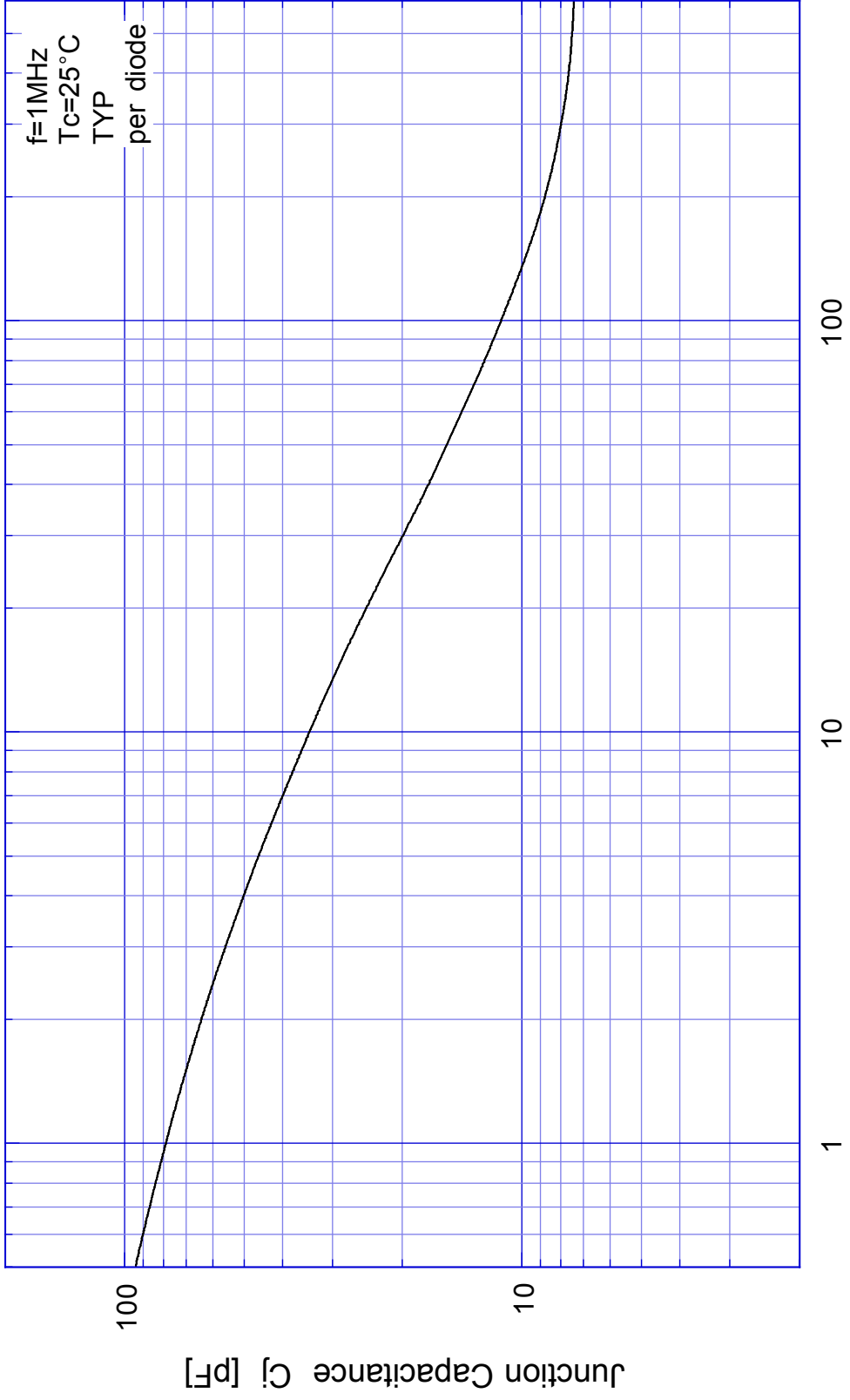
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Peak Surge Forward Capability



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Junction Capacitance



Reverse Voltage V_R [V]

Junction Capacitance C_j [pF]