

SHINDENGEN

Super Fast Recovery Rectifiers

Single

DF10L60

600V 10A

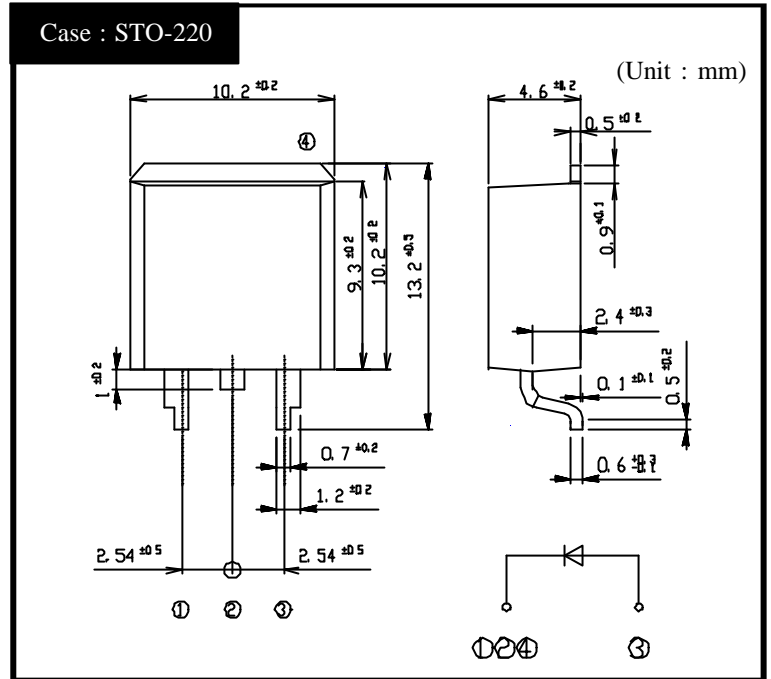
FEATURES

SMT
High Voltage
trr50ns

APPLICATION

PFC
Switching power supply
Free Wheel
Home Appliances, Office Equipment,
Factory Automation

OUTLINE DIMENSIONS



RATINGS

Absolute Maximum Ratings (If not specified Tc=25)

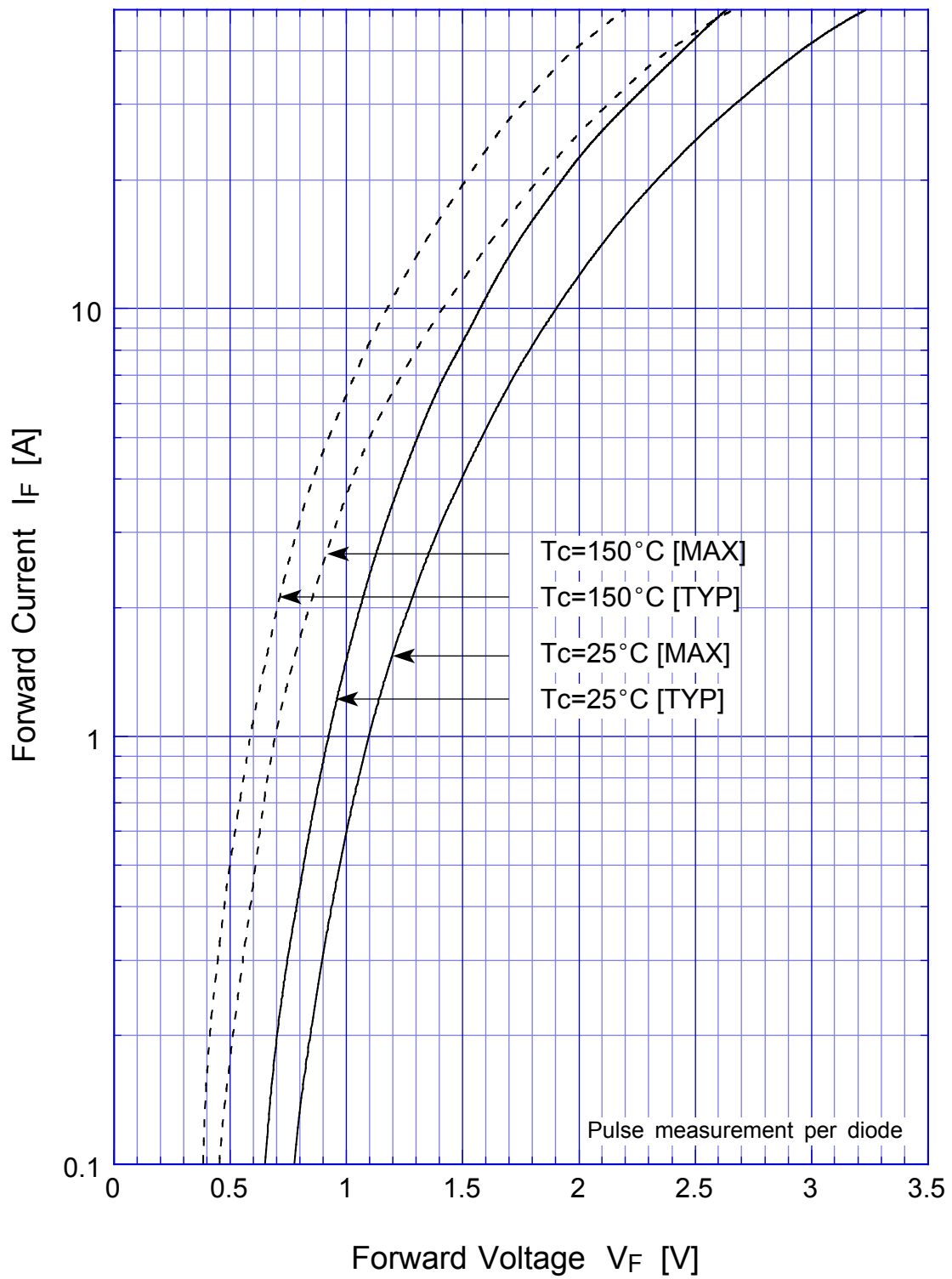
| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------------------|------------------|--|-----------|------|
| Storage Temperature | Tstg | | -55 ~ 150 | |
| Operating Junction Temperature | Tj | | 150 | |
| Maximum Reverse Voltage | V _{RM} | | 600 | V |
| Average Rectified Forward Current | I _O | 50Hz sine wave, R-load, Tc=105 | 10 | A |
| Peak Surge Forward Current | I _{FSM} | 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25 | 100 | A |

Electrical Characteristics (If not specified Tc=25)

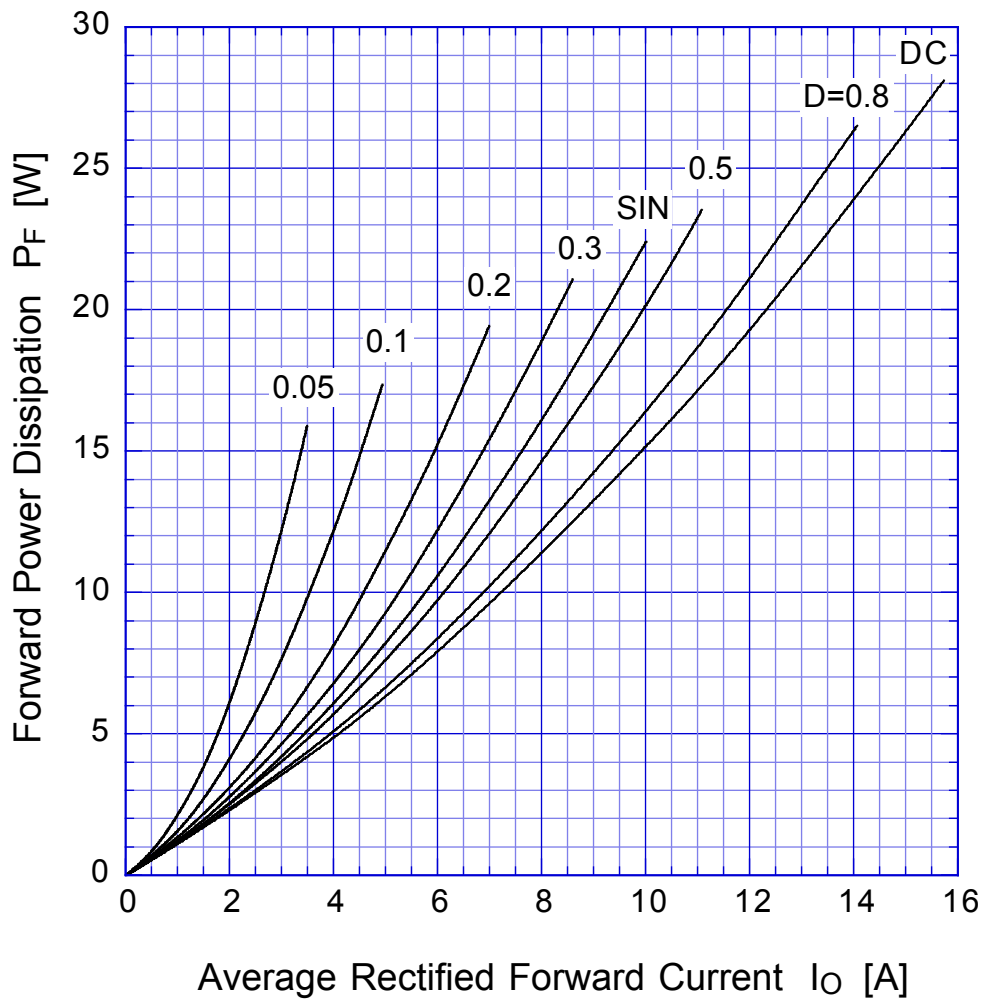
| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------|-----------------|---|---------|------|
| Forward Voltage | V _F | I _F =10A, Pulse measurement | Max.1.9 | V |
| Reverse Current | I _R | V _R =V _{RM} , Pulse measurement | Max.10 | μA |
| Reverse Recovery Time | t _{rr} | I _F =0.5A, I _R =1A | Max.50 | ns |
| Thermal Resistance | θ _{JC} | junction to case | Max.2 | /W |

DF10L60

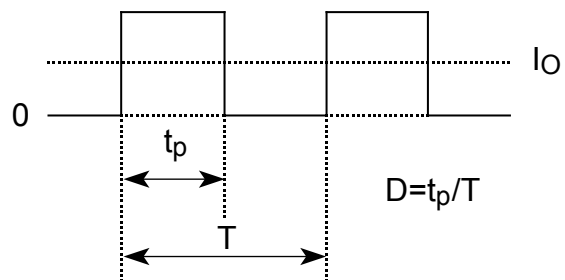
Forward Voltage



DF10L60 Forward Power Dissipation

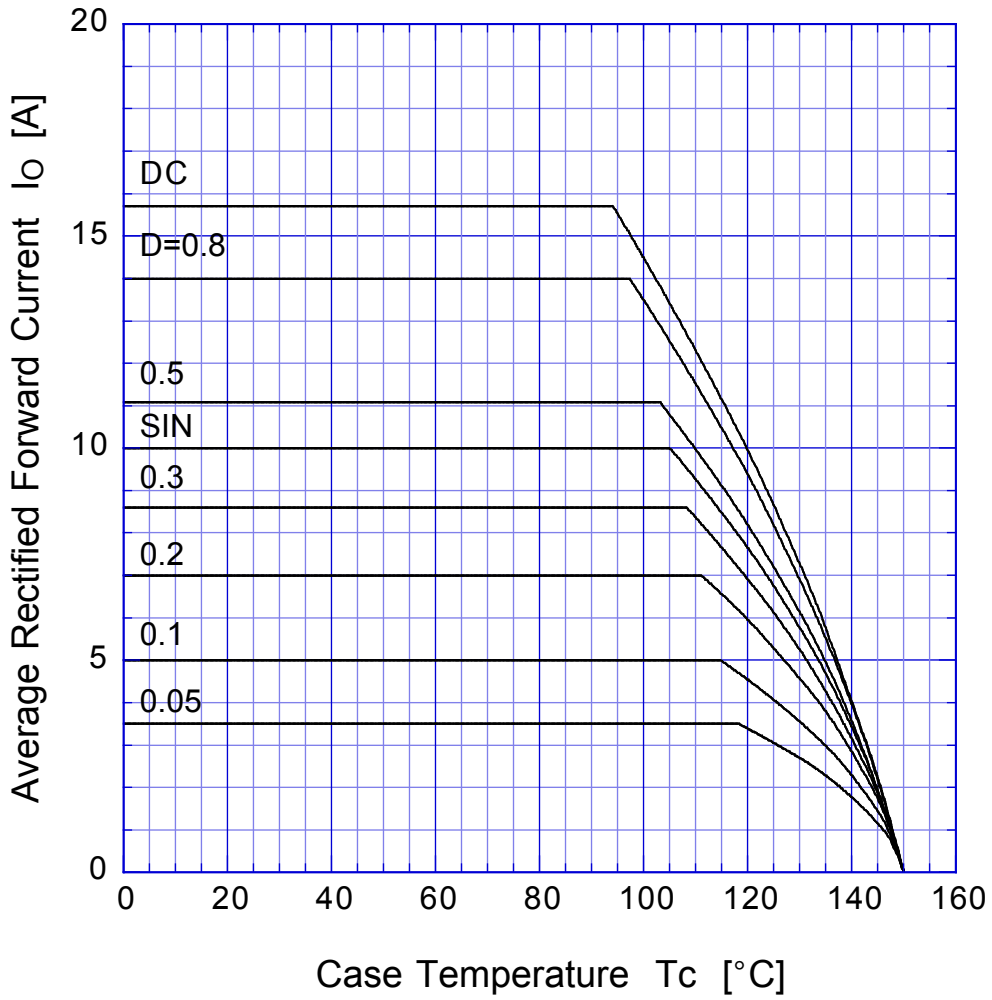


$T_j = 150^\circ\text{C}$



DF10L60

Derating Curve

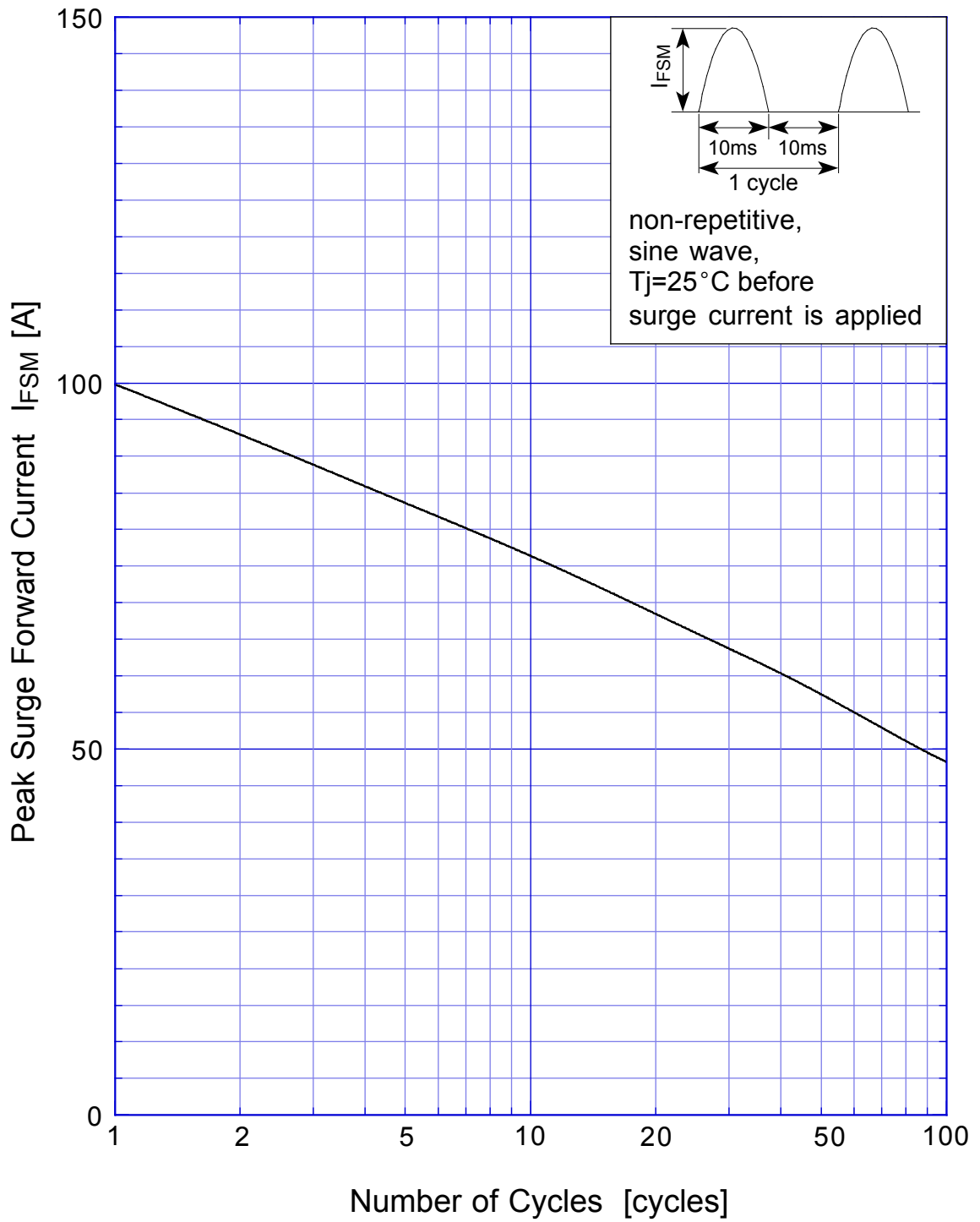


$$V_R = V_{RM}$$



DF10L60

Peak Surge Forward Capability



DF10L60 Junction Capacitance

