

SHINDENGEN

Super Fast Recovery Rectifiers

Dual

DF20LC20U

200V 20A

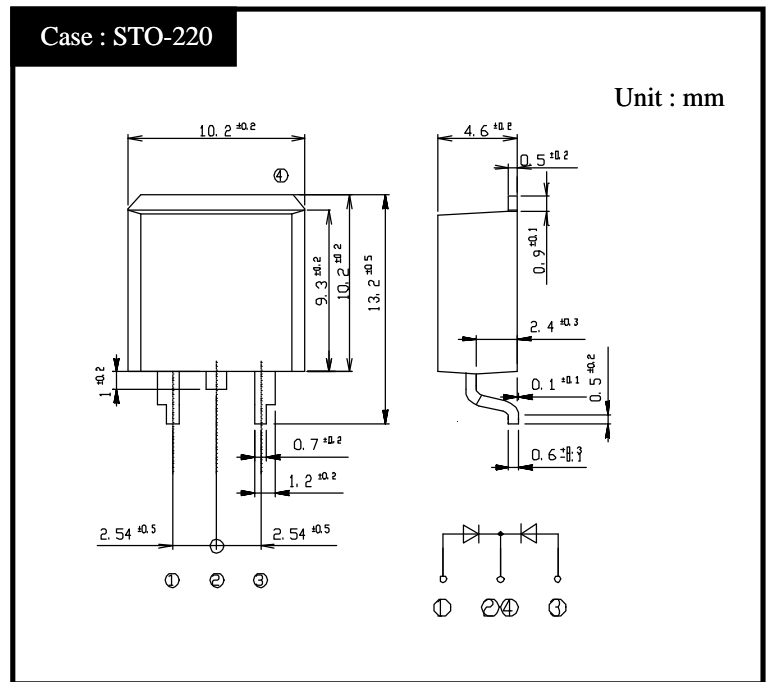
FEATURES

SMT
Low noise
trr35ns

APPLICATION

Switching power supply
DC/DC converter
Free Wheel
Home Appliances, Office Equipment
Telecommunication, Factory Automation

OUTLINE DIMENSIONS



RATINGS

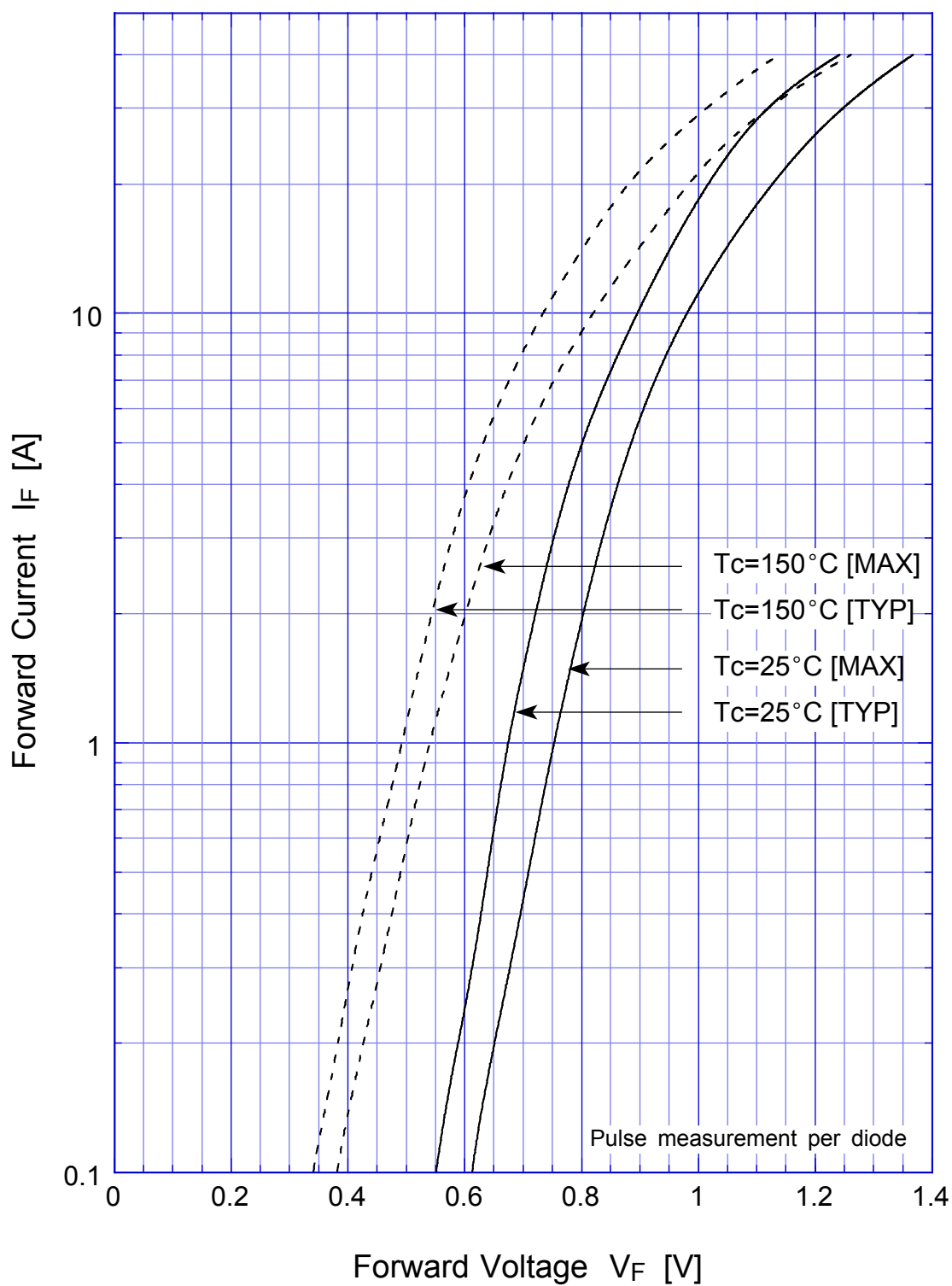
Absolute Maximum Ratings (If not specified Tc=25)

| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------------------|------------------|---|-----------|------|
| Storage Temperature | Tstg | | -40 ~ 150 | |
| Operating Junction Temperature | Tj | | 150 | |
| Maximum Reverse Voltage | V _{RM} | | 200 | V |
| Average Rectified Forward Current | I _O | 50Hz sine wave, R-load, Rating for each diode I _O /2, Tc=114 | 20 | A |
| Peak Surge Forward Current | I _{FSM} | 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25 | 140 | A |

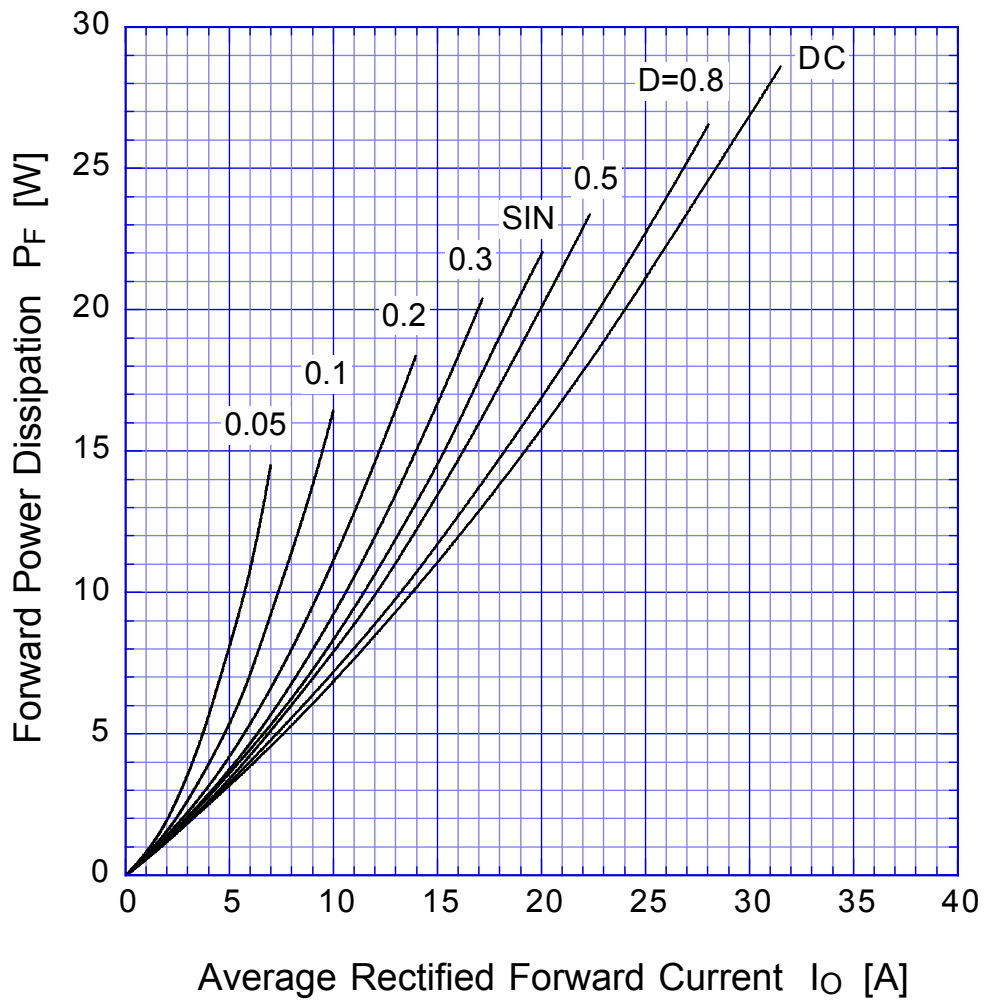
Electrical Characteristics (If not specified Tc=25)

| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------|----------------|--|----------|------|
| Forward Voltage | V _F | I _F =10A, Pulse measurement, Rating of per diode | Max.0.98 | V |
| Reverse Current | I _R | V _R =V _{RM} , Pulse measurement, Rating of per diode | Max.10 | μ A |
| Reverse Recovery Time | trr | I _F =0.5A, I _R =1A, Rating of per diode | Max.35 | ns |
| Thermal Resistance | jc | junction to case | Max.1.6 | /W |

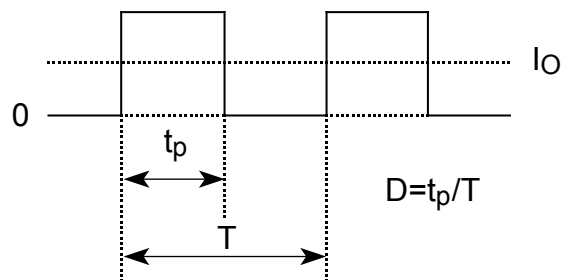
DF20LC20U Forward Voltage



DF20LC20U Forward Power Dissipation

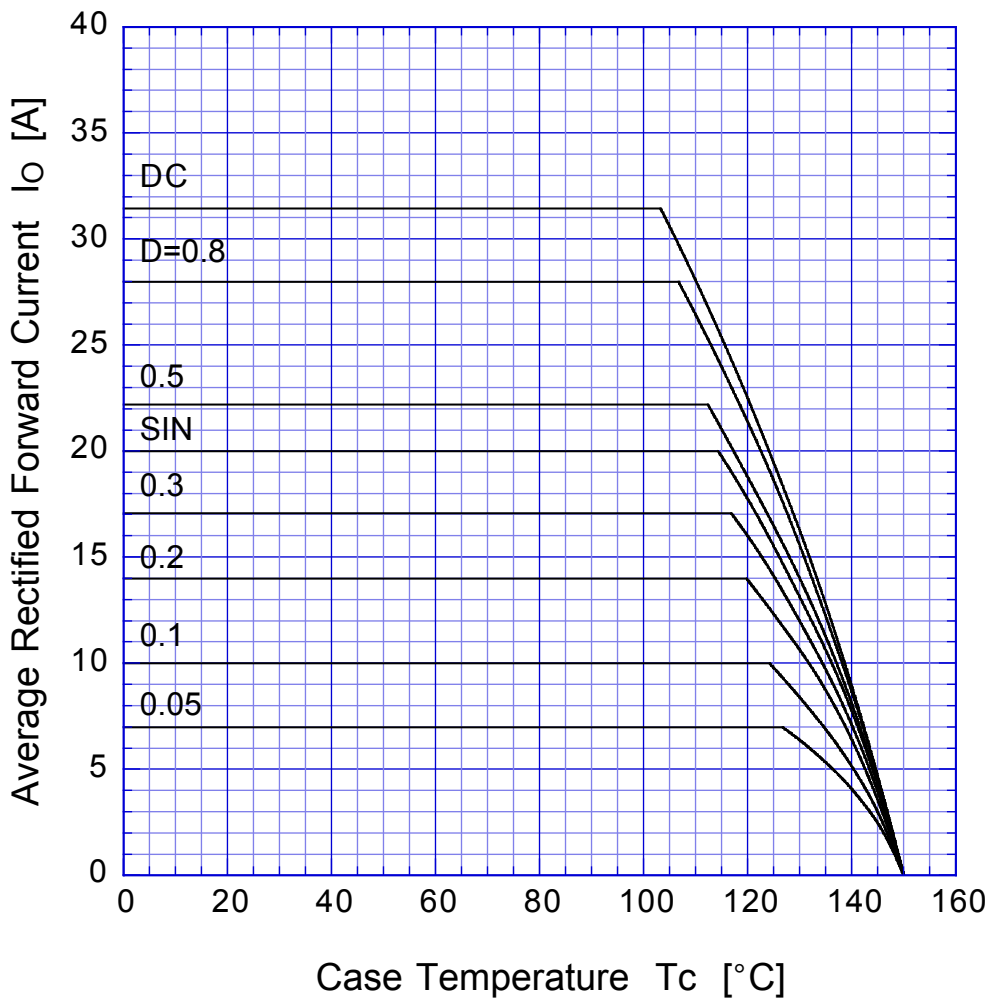


$T_j = T_{jmax}$

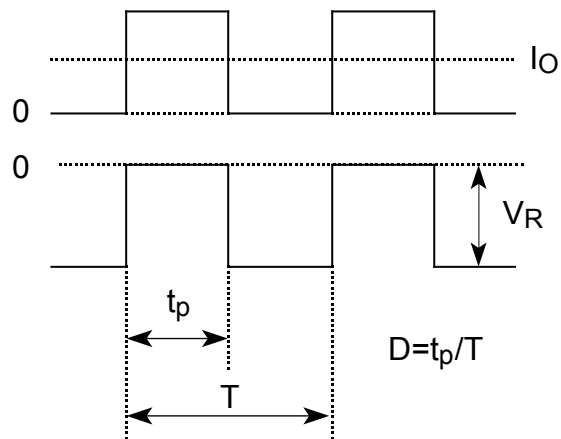


DF20LC20U

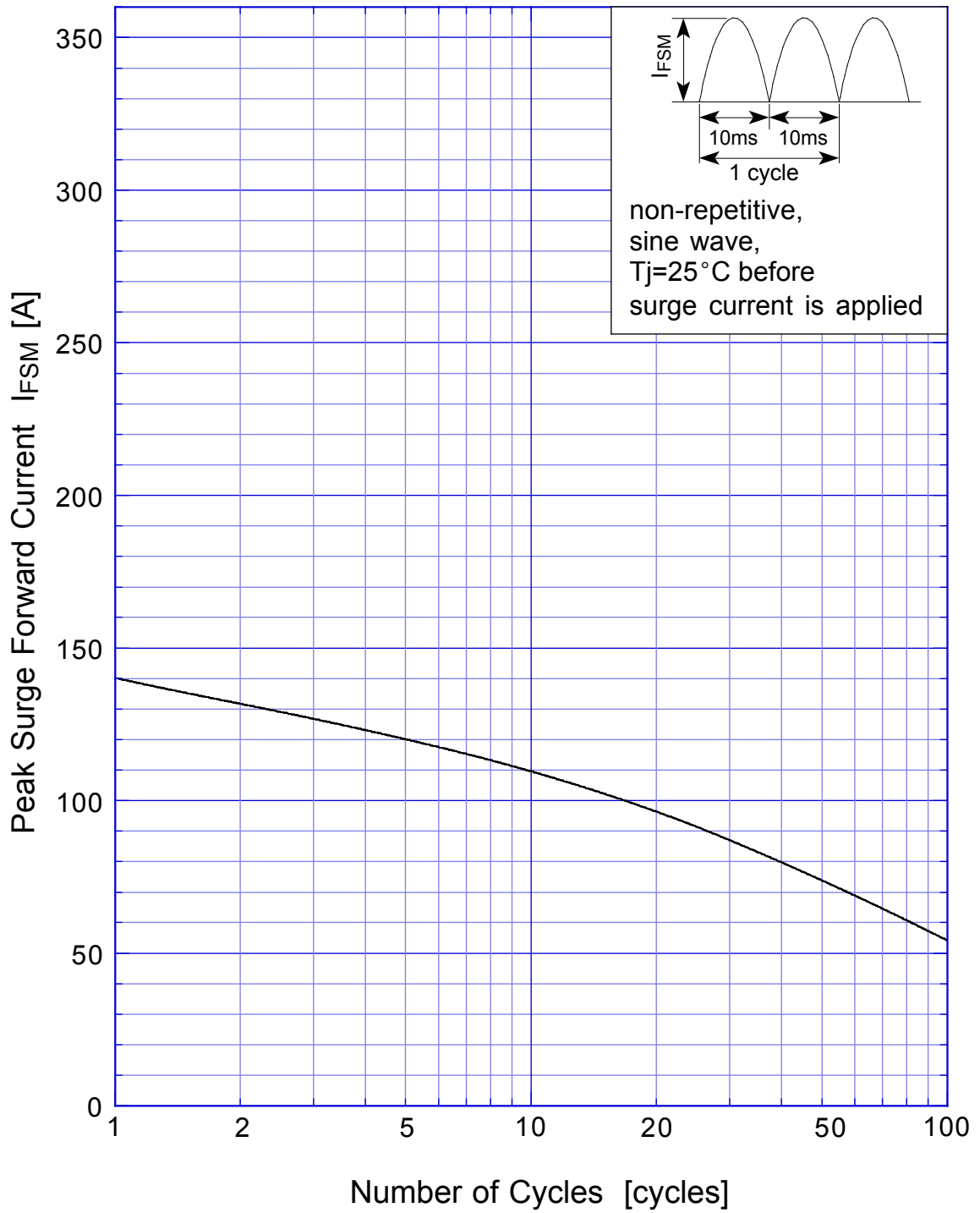
Derating Curve



$$V_R = V_{RM}$$



DF20LC20U Peak Surge Forward Capability



DF20LC20U Junction Capacitance

