

SHINDENGEN

Schottky Rectifiers (SBD)

Dual

DF20PC3M

30V 20A

FEATURES

- SMT
- Super low $V_F=0.4V$
- High current capacity with Small Package

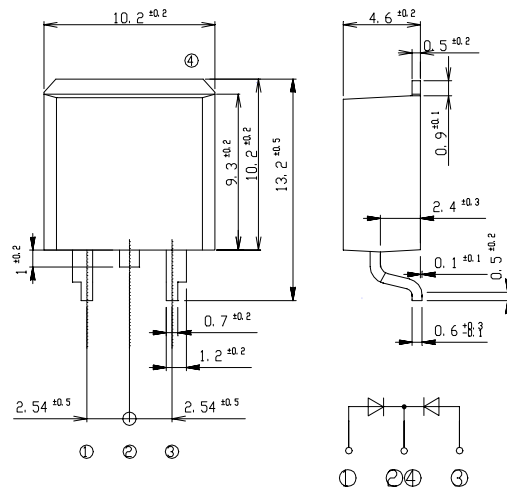
APPLICATION

- Reversed Battery Connection Protection
- DC OR output
- DC/DC converter
- Mobile telephone, personal computer

OUTLINE DIMENSIONS

Case : STO-220

Unit : mm



RATINGS

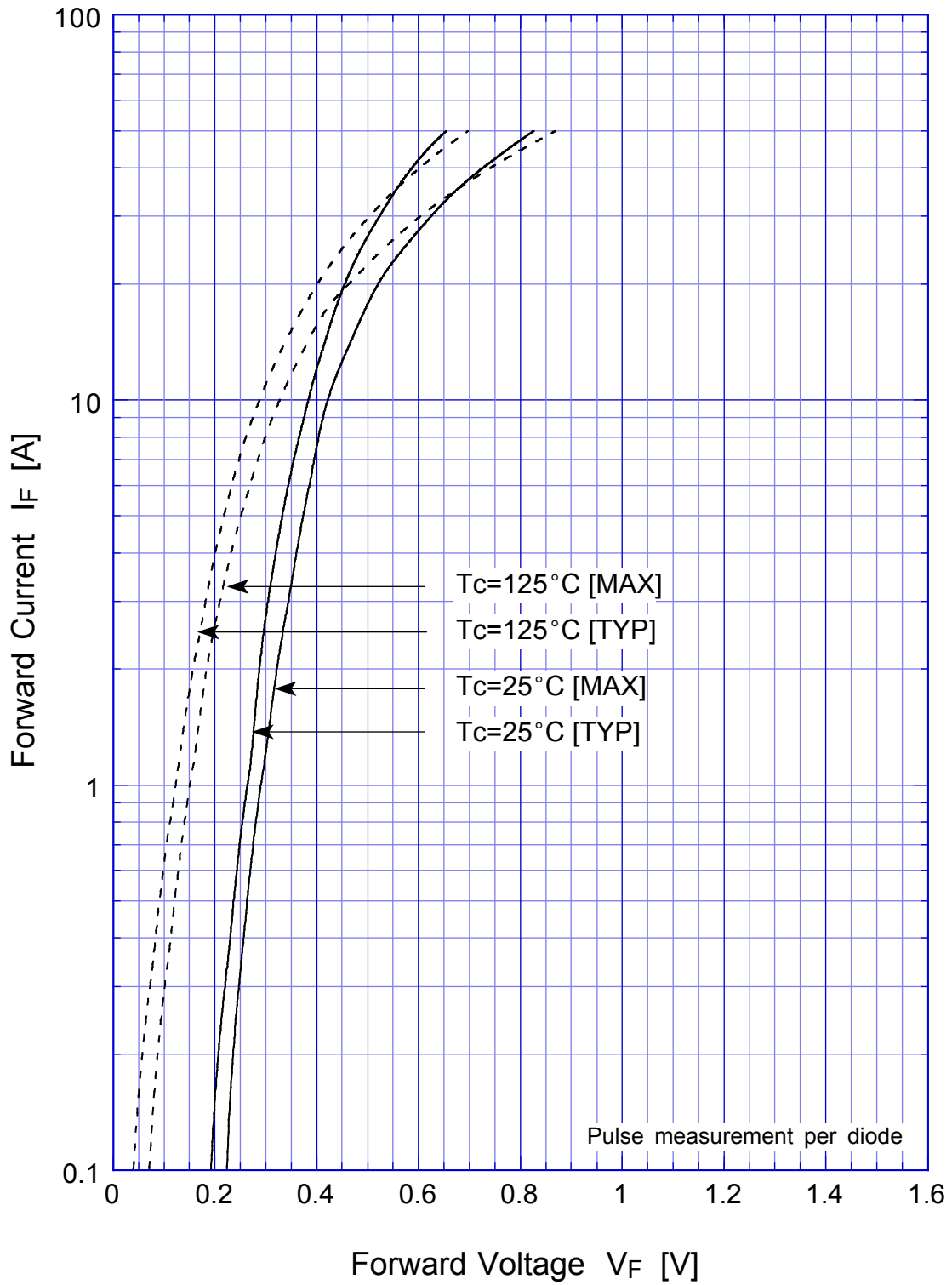
● Absolute Maximum Ratings (If not specified $T_c=25^{\circ}C$)

| Item | Symbol | Conditions | Ratings | Unit |
|---|-----------|--|---------|-------------|
| Storage Temperature | T_{stg} | | -55~125 | $^{\circ}C$ |
| Operating Junction Temperature | T_j | | 125 | $^{\circ}C$ |
| Maximum Reverse Voltage | V_{RM} | | 30 | V |
| Non-Repetitive Peak Surge Reverse Voltage | V_{RSM} | | 35 | V |
| Average Rectified Forward Current | I_O | 50Hz sine wave, R-load, Rating for each diode $I_o/2$, $T_c=105^{\circ}C$ | 20 | A |
| Peak Surge Forward Current | I_{FSM} | 50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^{\circ}C$ | 200 | A |

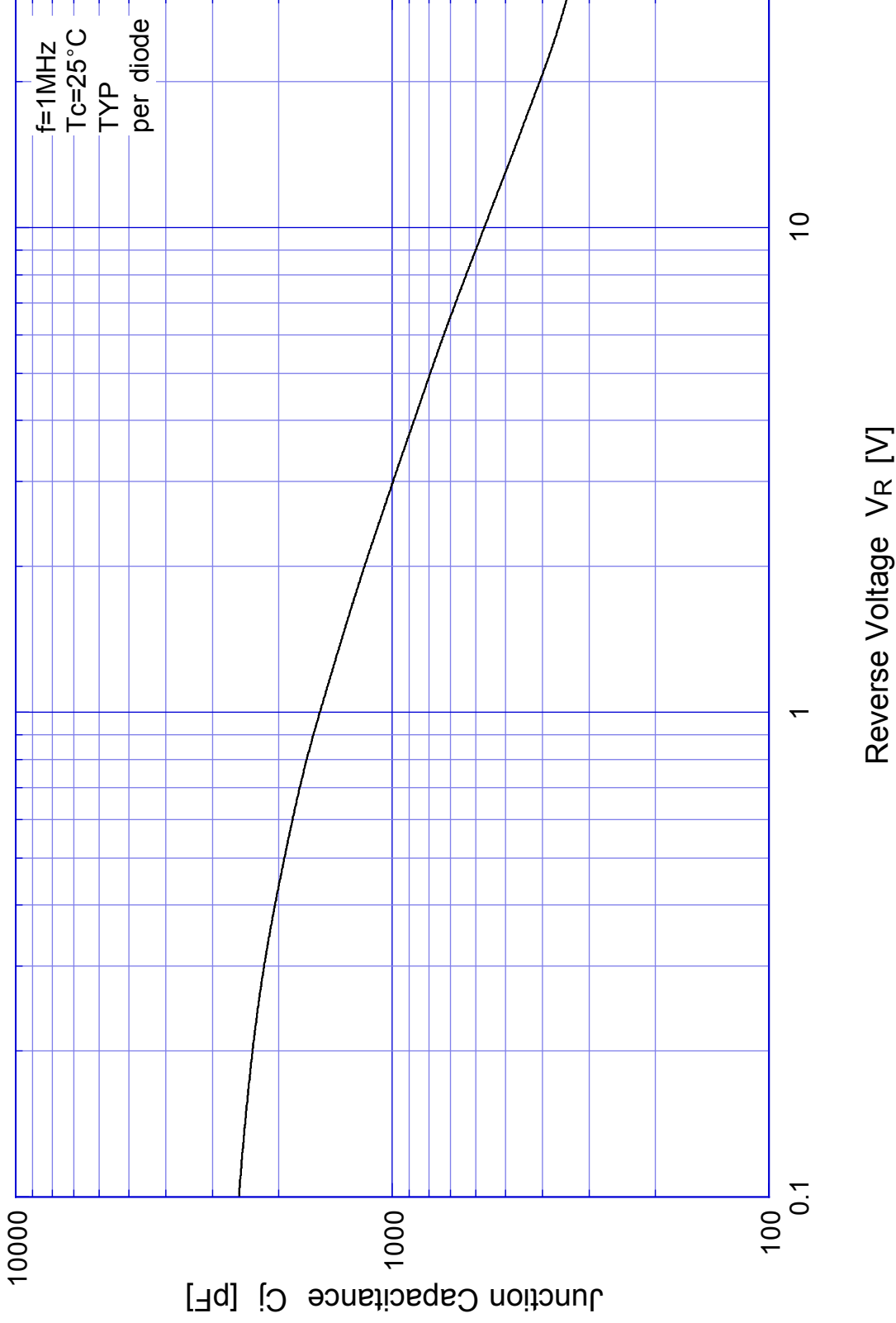
● Electrical Characteristics (If not specified $T_c=25^{\circ}C$)

| Item | Symbol | Conditions | Ratings | Unit |
|----------------------|---------------|---|----------|---------------|
| Forward Voltage | V_F | $I_F=8A$, Pulse measurement, Rating of per diode | Max.0.40 | V |
| Reverse Current | I_R | $V_R=V_{RM}$, Pulse measurement, Rating of per diode | Max.35 | mA |
| Junction Capacitance | C_j | $f=1MHz$, $V_R=10V$, Rating of per diode | Typ.560 | pF |
| Thermal Resistance | θ_{jc} | junction to case | Max.1.6 | $^{\circ}C/W$ |

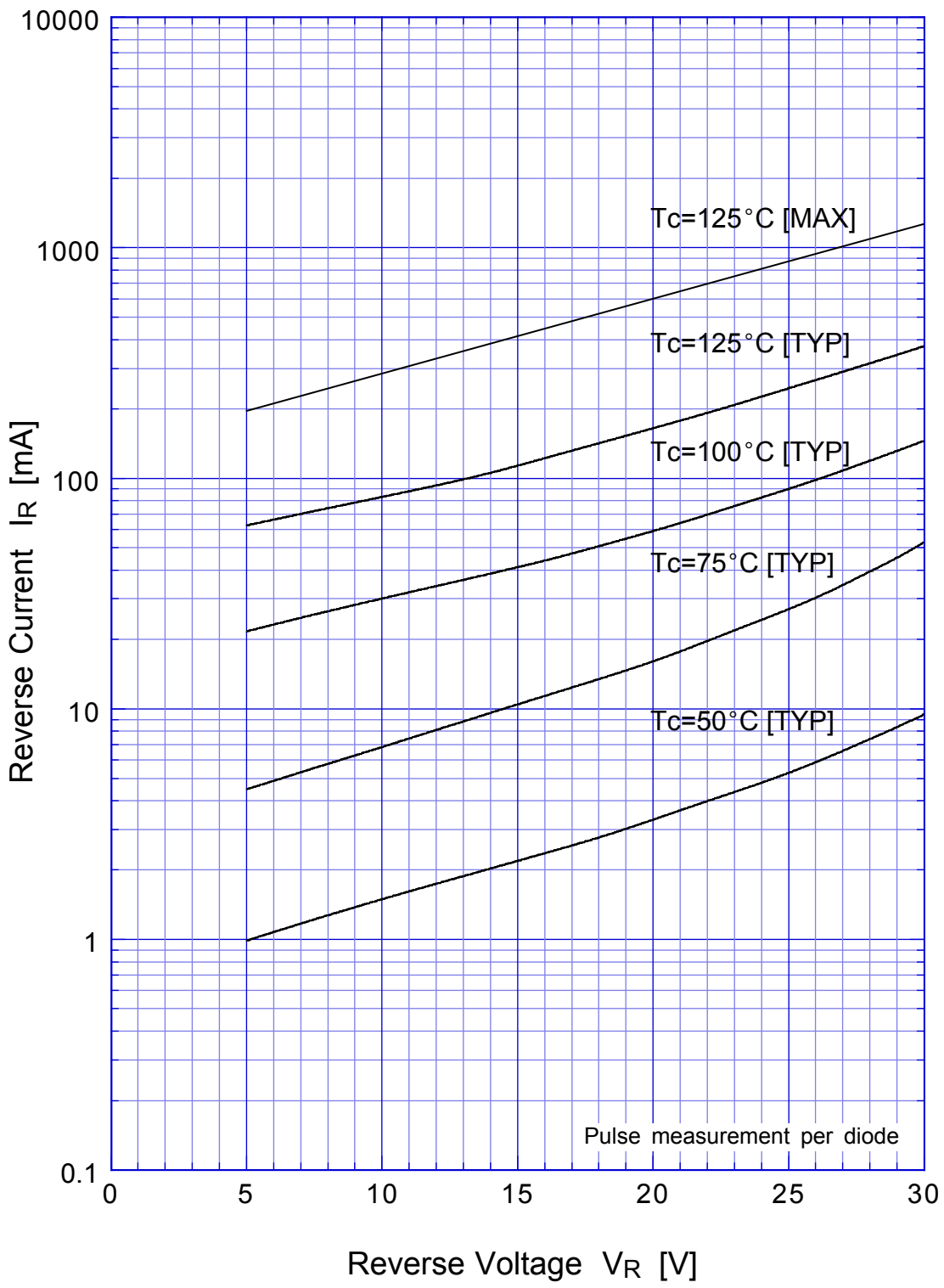
DF20PC3M Forward Voltage



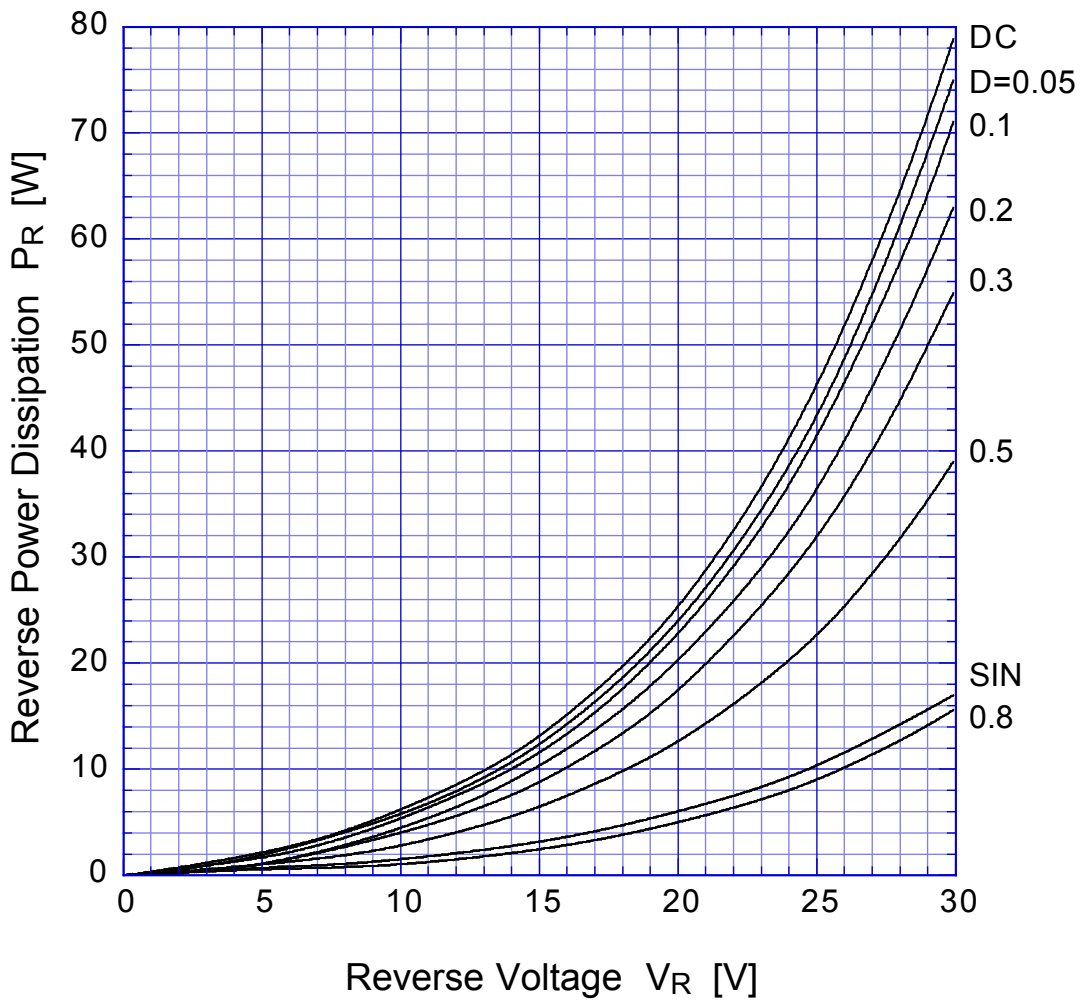
DF20PC3M Junction Capacitance



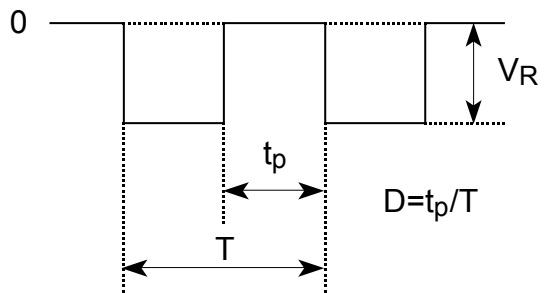
DF20PC3M Reverse Current



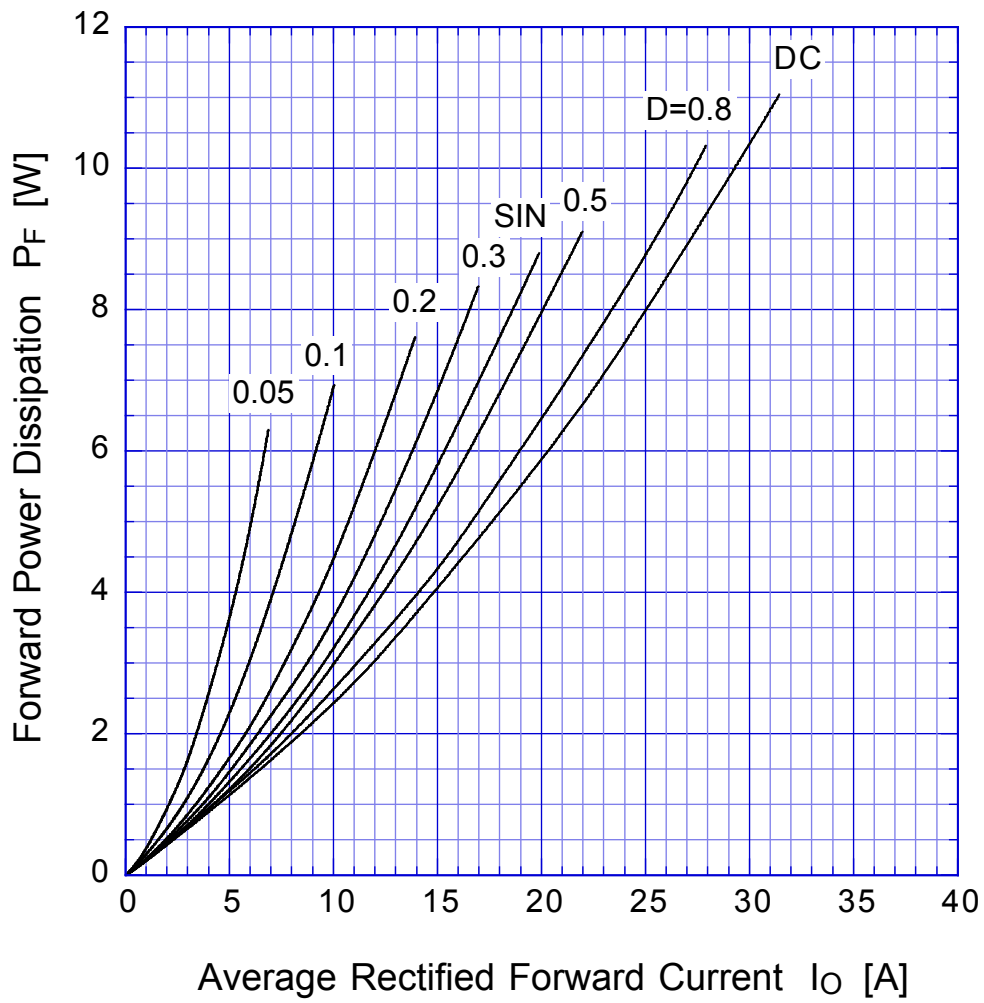
DF20PC3M Reverse Power Dissipation



$T_j = T_{jmax}$



DF20PC3M Forward Power Dissipation

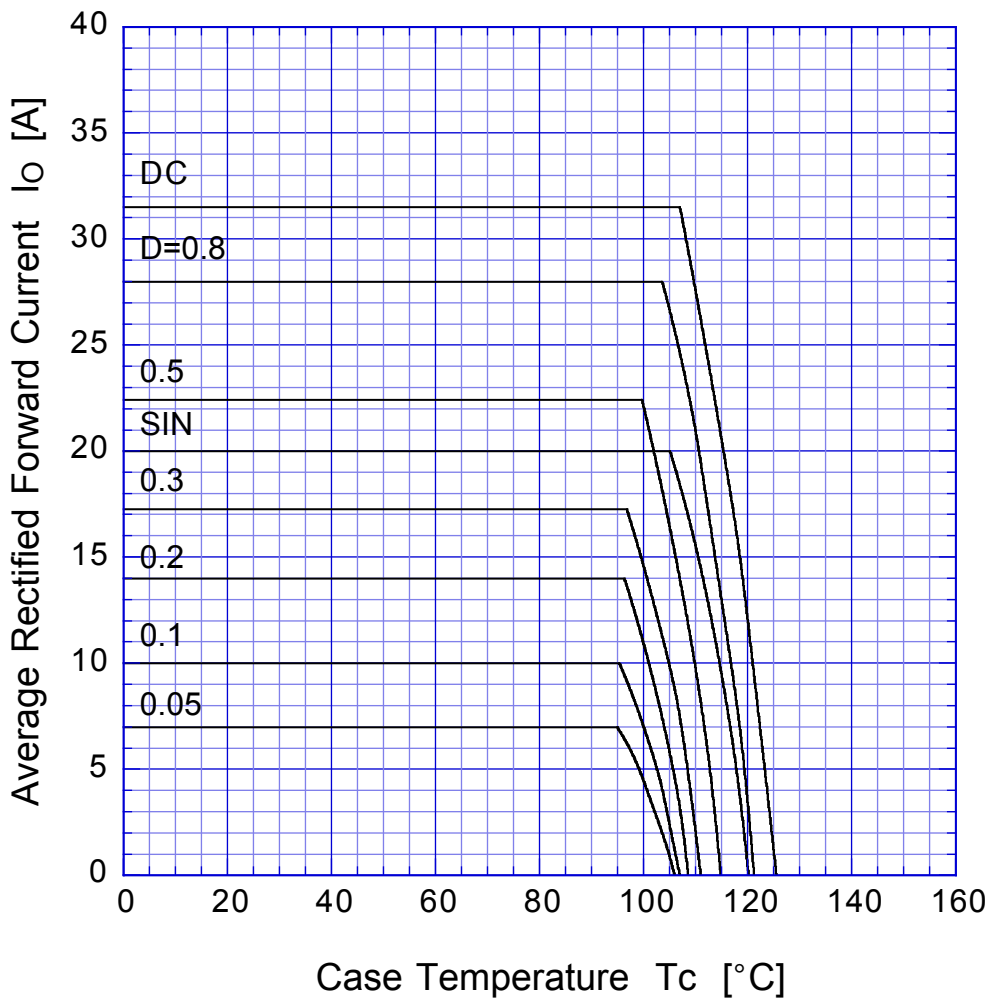


$T_j = T_{jmax}$

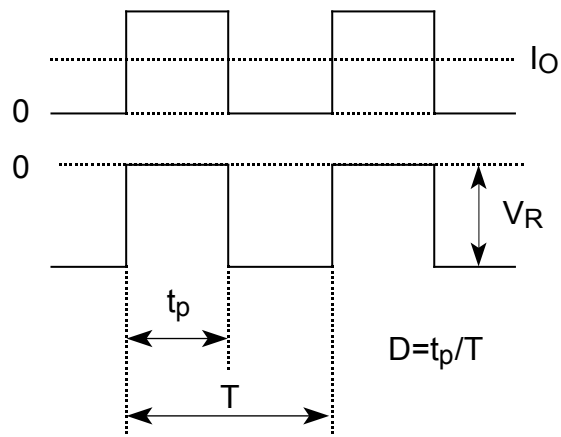


DF20PC3M

Derating Curve



$$V_R = V_{RM}/2$$



DF20PC3M Peak Surge Forward Capability

