

SHINDENGEN

Schottky Rectifiers (SBD)

Dual

DF40PC3

30V 40A

FEATURES

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

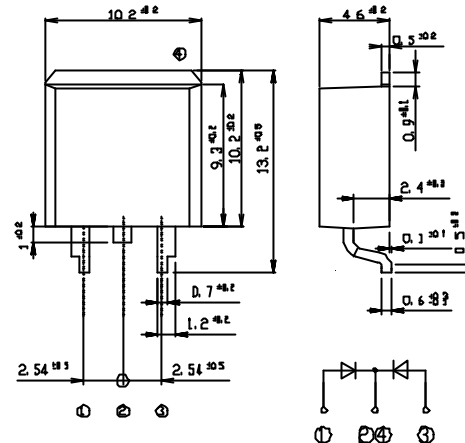
APPLICATION

- 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 $T_c=25$)

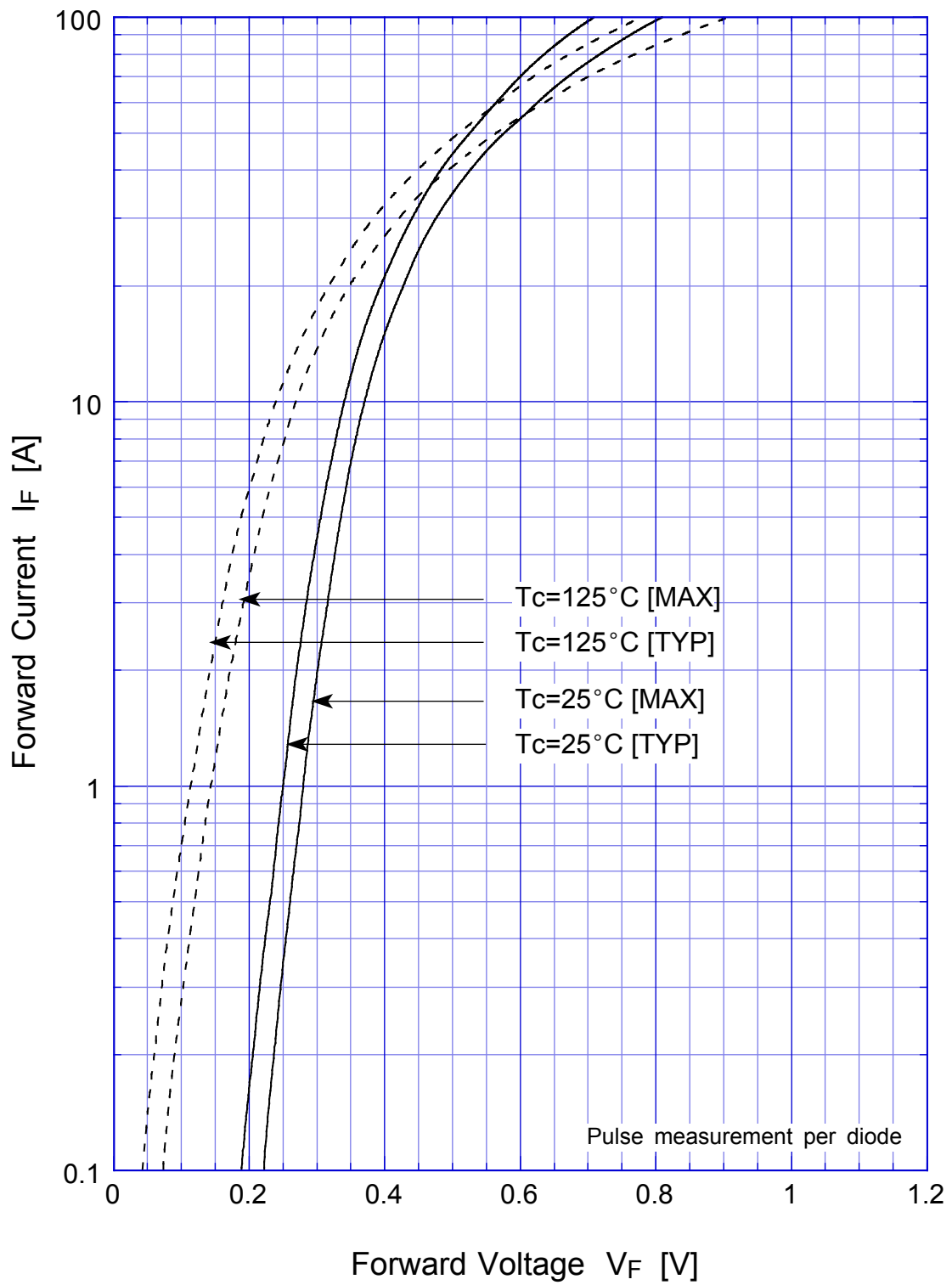
| Item | Symbol | Conditions | Ratings | Unit |
|---------------------------------------|------------|---|-----------|------|
| Storage Temperature | T_{stg} | | -55 ~ 125 | |
| Operating Junction Temperature | T_j | | 125 | |
| Maximum Reverse Voltage | V_{RM} | | 30 | V |
| Repetitive Peak Surge Reverse Voltage | V_{RRSM} | Pulse width 0.5ms, duty 1/40 | 35 | V |
| Average Rectified Forward Current | I_o | 50Hz sine wave, R-load, Rating for each diode $I_o/2$, $T_c=105$ | 40 | A |
| Peak Surge Forward Current | I_{FSM} | 50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25$ | 350 | A |

Electrical Characteristics (If not specified $T_c=25$)

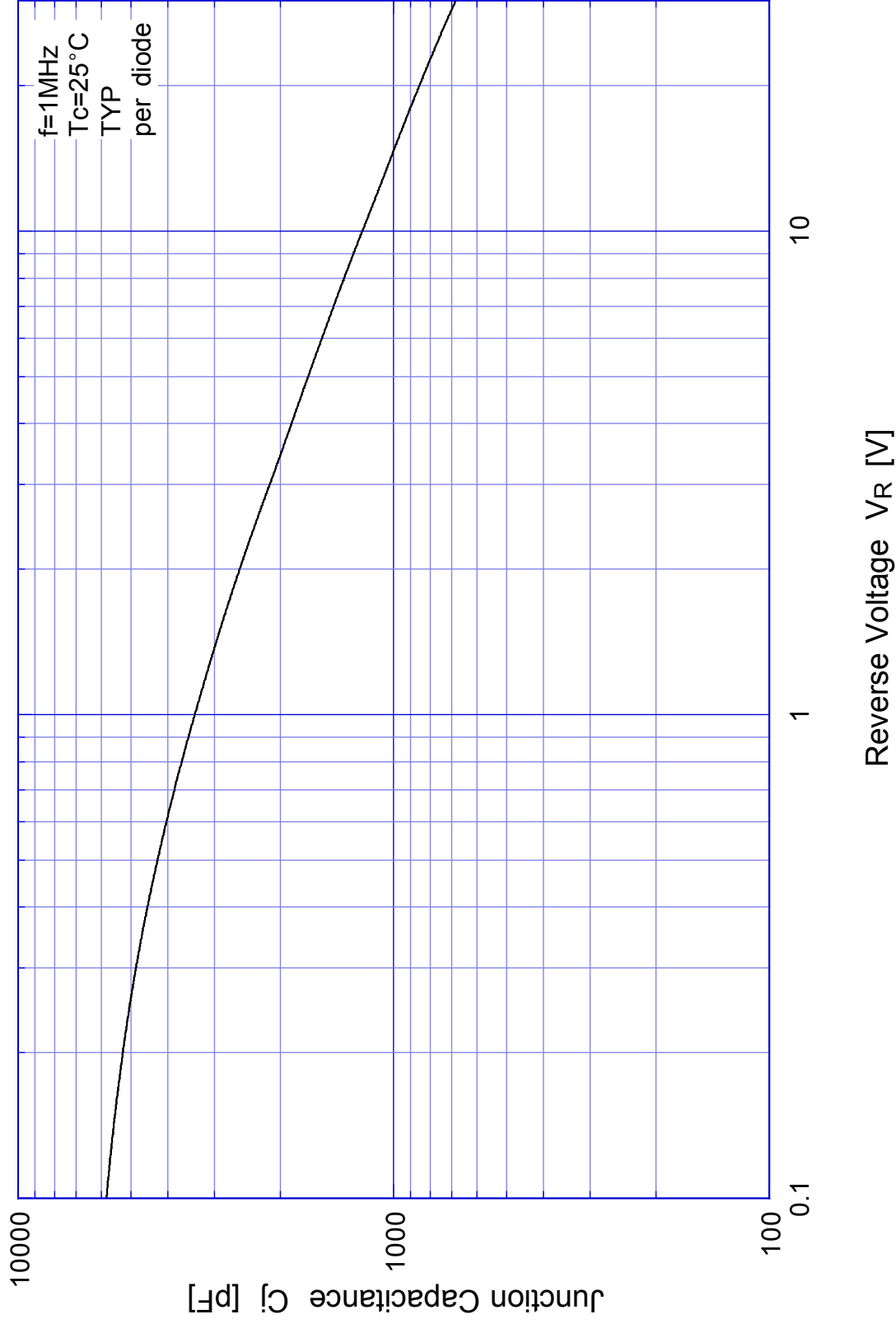
| Item | Symbol | Conditions | Ratings | Unit |
|----------------------|------------|---|----------|------|
| Forward Voltage | V_F | $I_F=15A$, Pulse measurement, Rating of per diode | Max.0.4 | V |
| Reverse Current | I_R | $V_R=V_{RM}$, Pulse measurement, Rating of per diode | Max.45 | mA |
| Junction Capacitance | C_j | $f=1MHz$, $V_R=10V$, Rating of per diode | Typ.1160 | pF |
| Thermal Resistance | θ_c | junction to case | Max.0.8 | /W |

DF40PC3

Forward Voltage

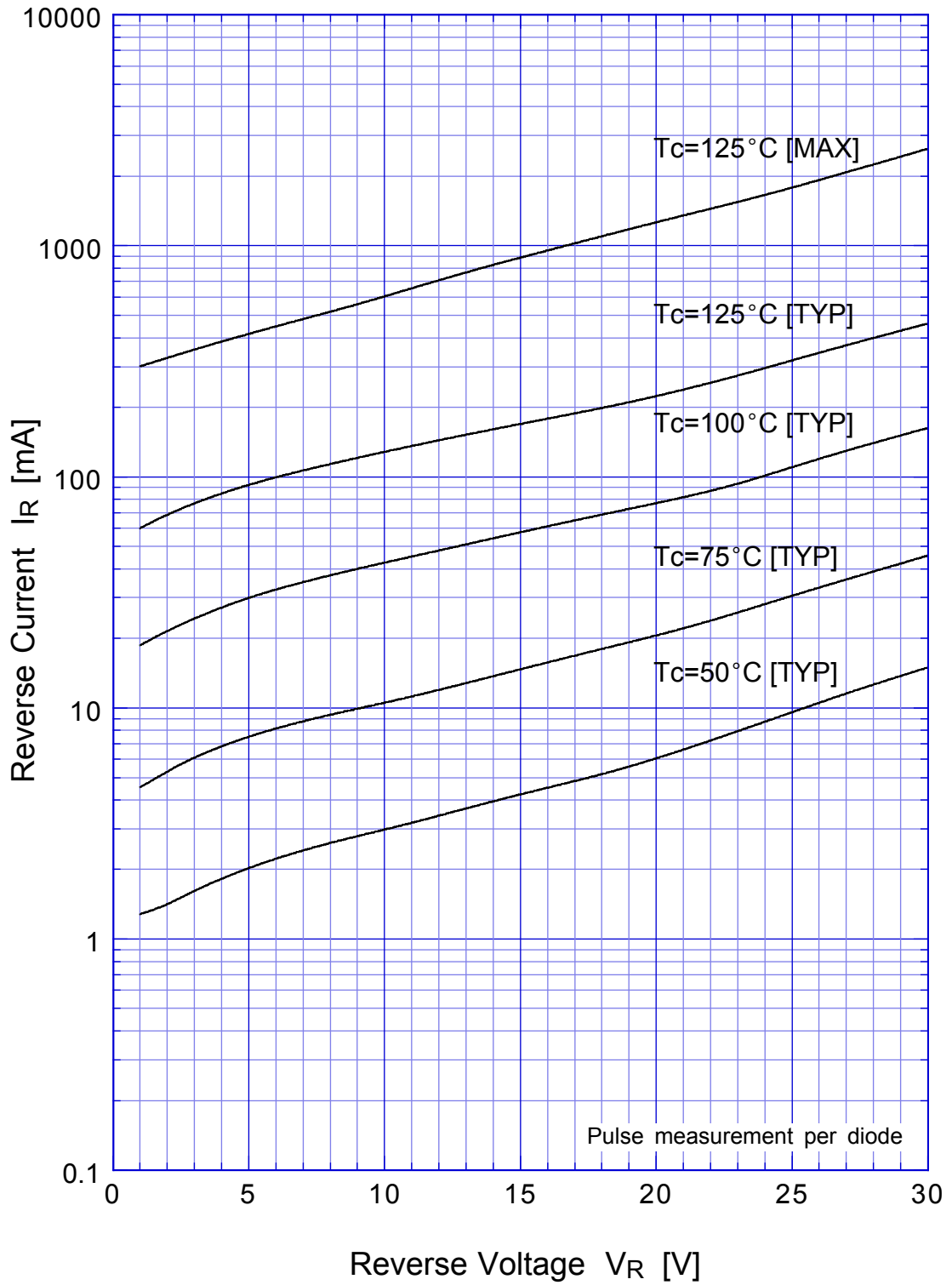


DF40PC3 Junction Capacitance

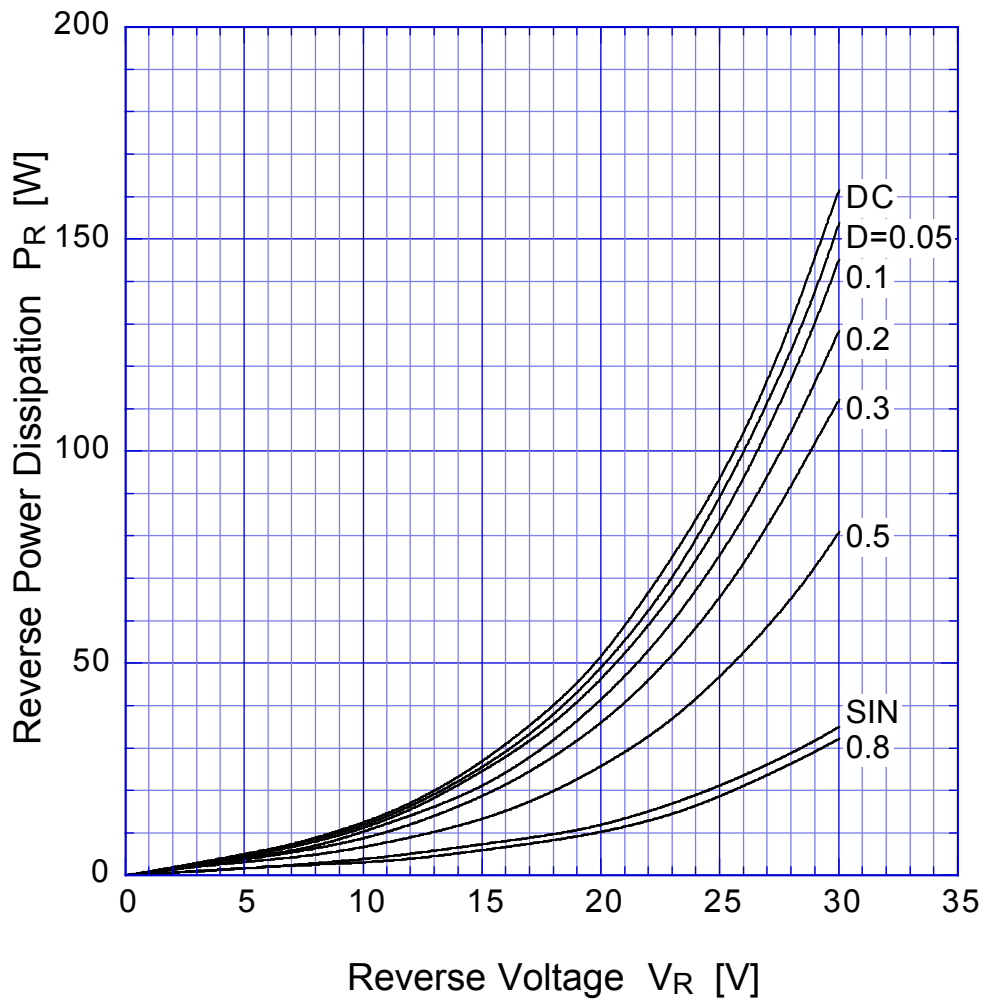


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Reverse Current



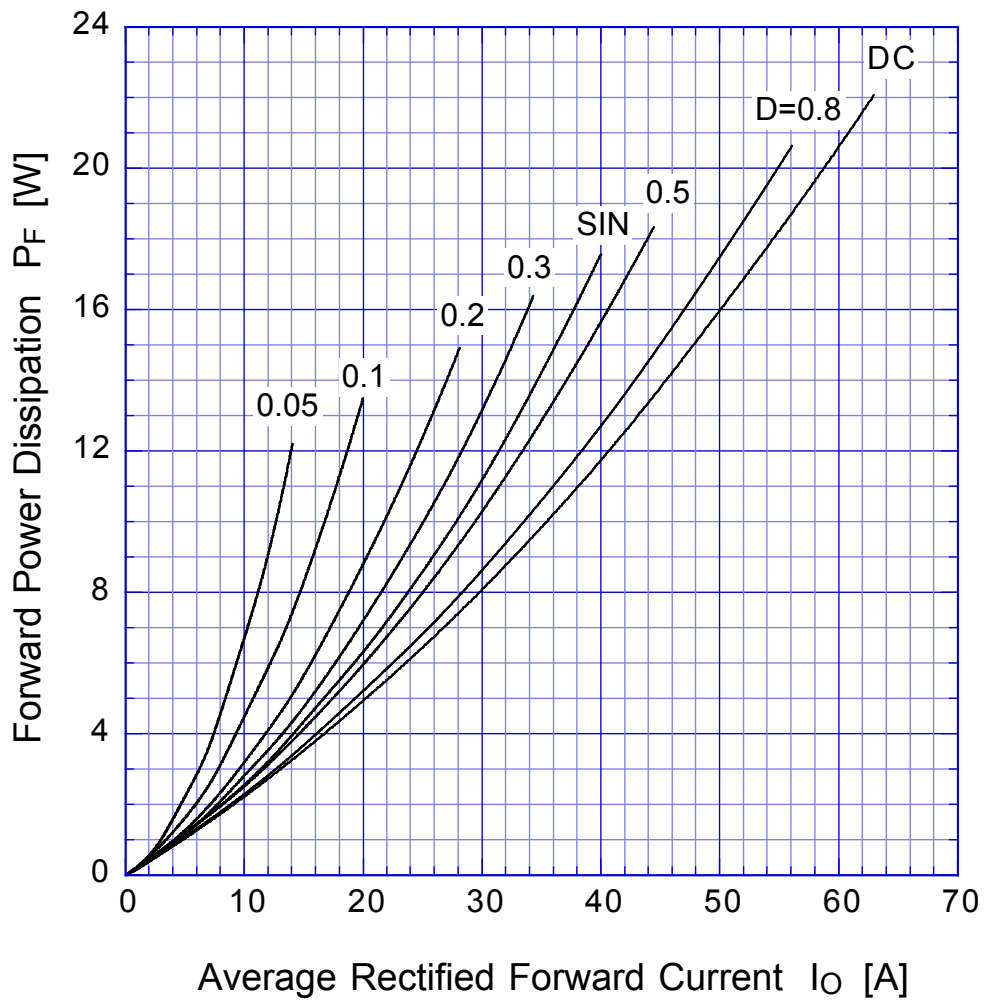
DF40PC3 Reverse Power Dissipation



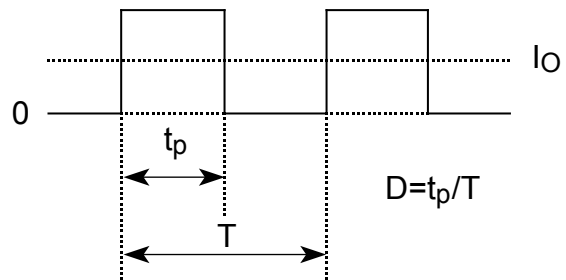
$T_j = 125^\circ\text{C}$



DF40PC3 Forward Power Dissipation

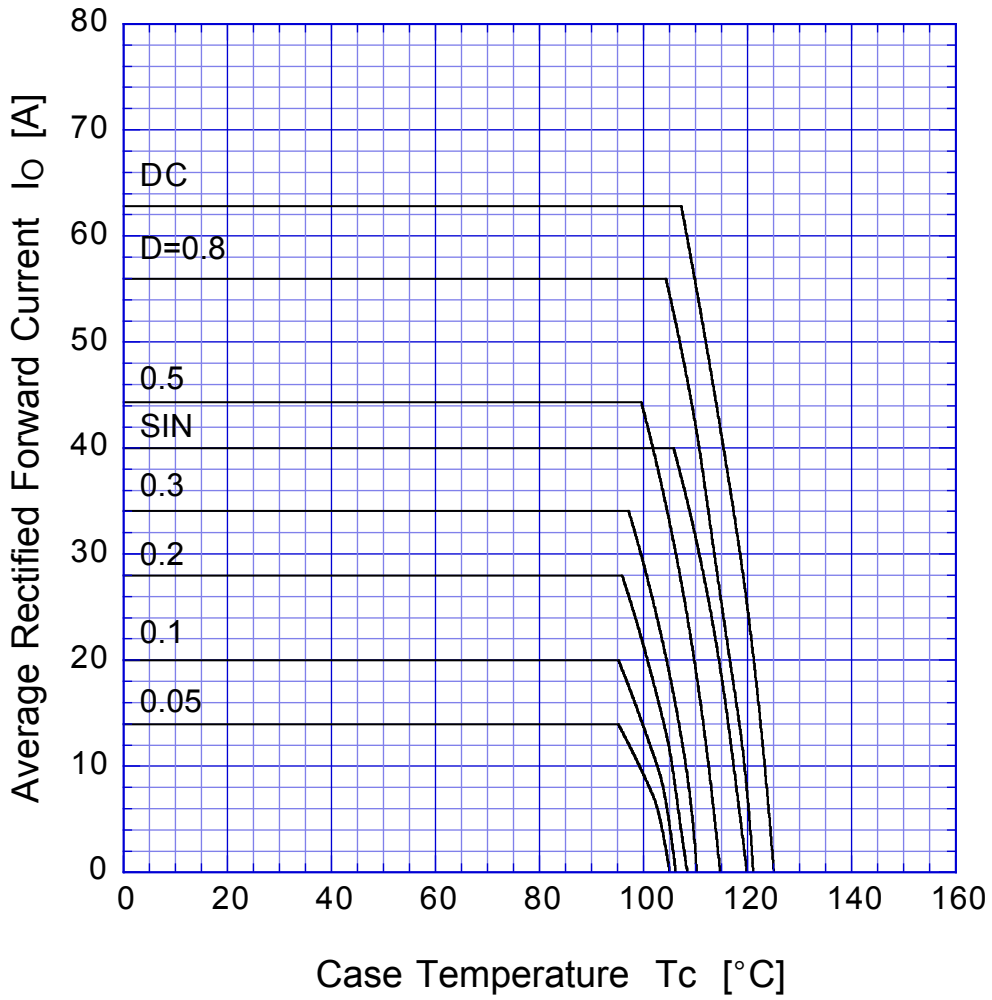


$T_j = 125^\circ\text{C}$



DF40PC3

Derating Curve



$V_R = 15V$



DF40PC3 Peak Surge Forward Capability

