

SHINDENGEN

Schottky Rectifiers (SBD)

Dual

DE10PC3

30V 10A

FEATURES

SMT

Super low $V_F=0.4V$

High current capacity with Small Package

APPLICATION

Reversed Battery Connection Protection

DC OR output

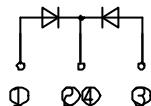
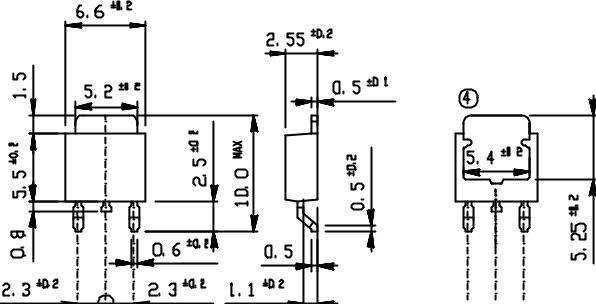
DC/DC converter

Mobile telephone, personal computer

OUTLINE DIMENSIONS

Case : E-pack

Unit : mm



RATINGS

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

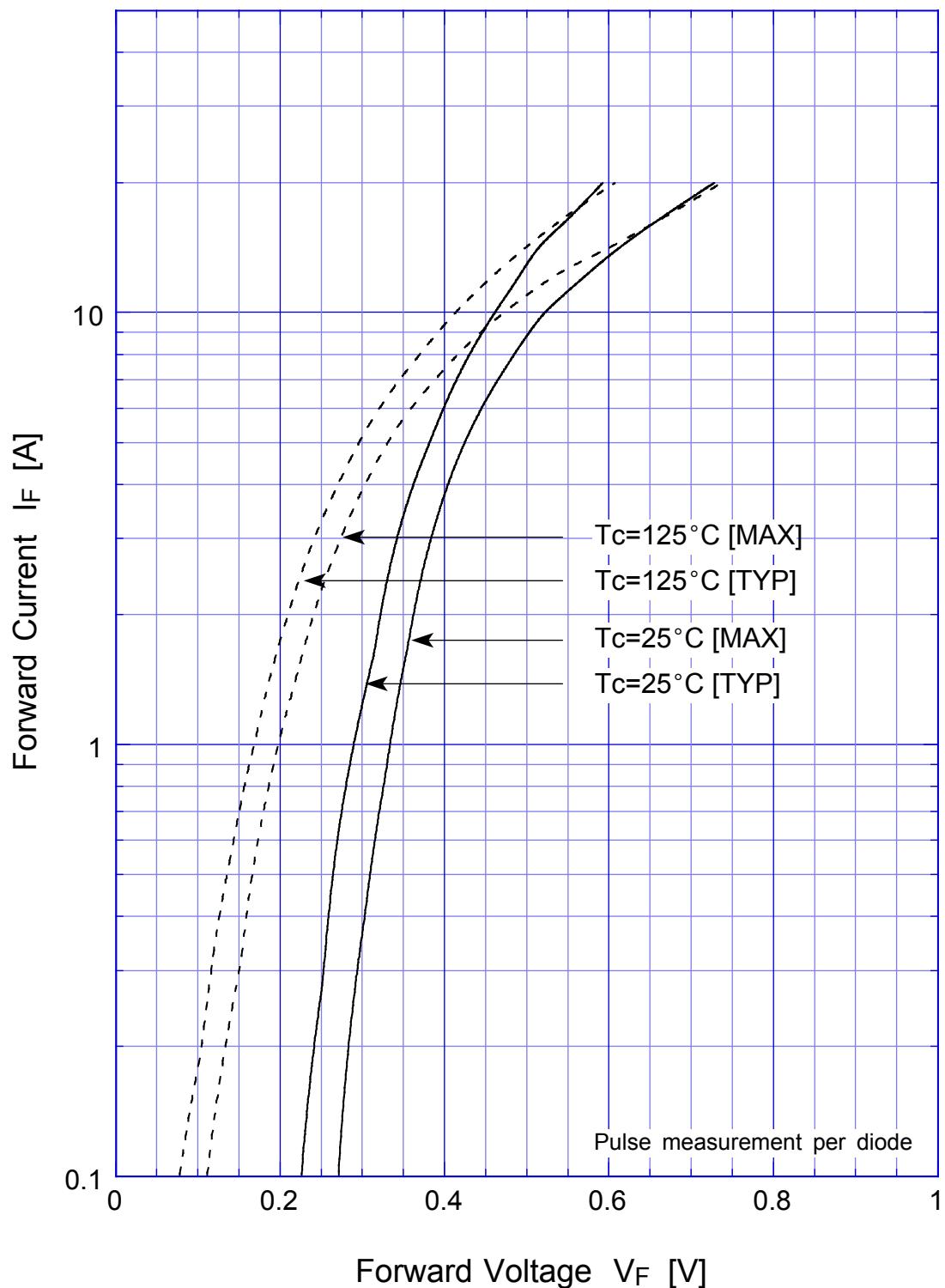
| Item | Symbol | Conditions | Ratings | Unit |
|---------------------------------------|------------|--|-----------|------|
| Storage Temperature | T_{stg} | | -55 ~ 125 | |
| Operating Junction Temperature | T_j | | 125 | |
| Maximum Reverse Voltage | V_{RM} | | 30 | V |
| Repetitive Peak Surge Reverse 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 $I_O/2$, $T_c=97^\circ C$ | 10 | A |
| Peak Surge Forward Current | I_{FSM} | 50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ C$ | 80 | A |

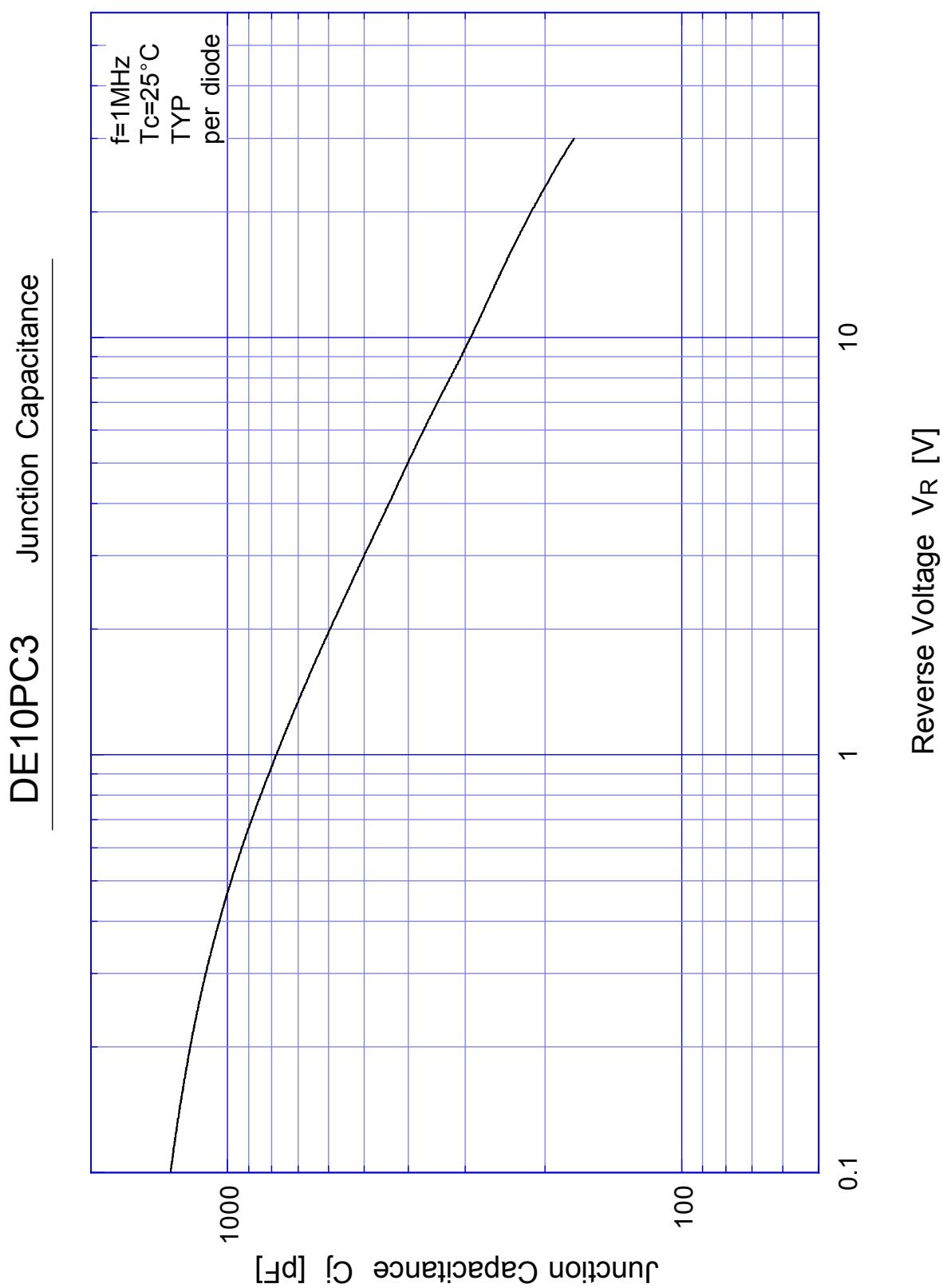
Electrical Characteristics (If not specified $T_c=25^\circ C$)

| Item | Symbol | Conditions | Ratings | Unit |
|----------------------|---------------|---|----------|------|
| Forward Voltage | V_F | $I_F=4A$, 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.10 | mA |
| Junction Capacitance | C_J | $f=1MHz$, $V_R=10V$, Rating of per diode | Typ.290 | pF |
| Thermal Resistance | θ_{JC} | junction to case | Max. 4.0 | /W |

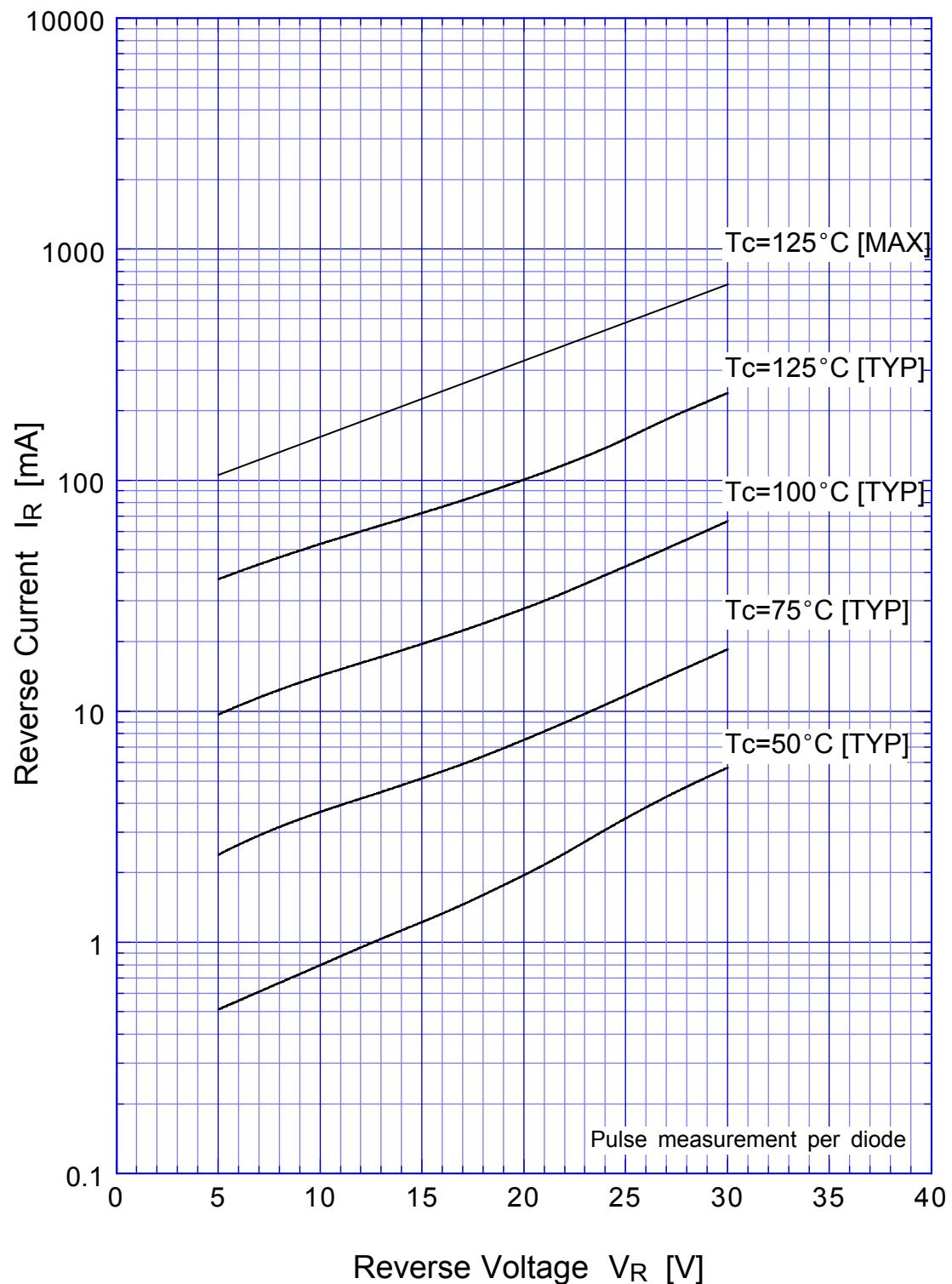
DE10PC3

Forward Voltage

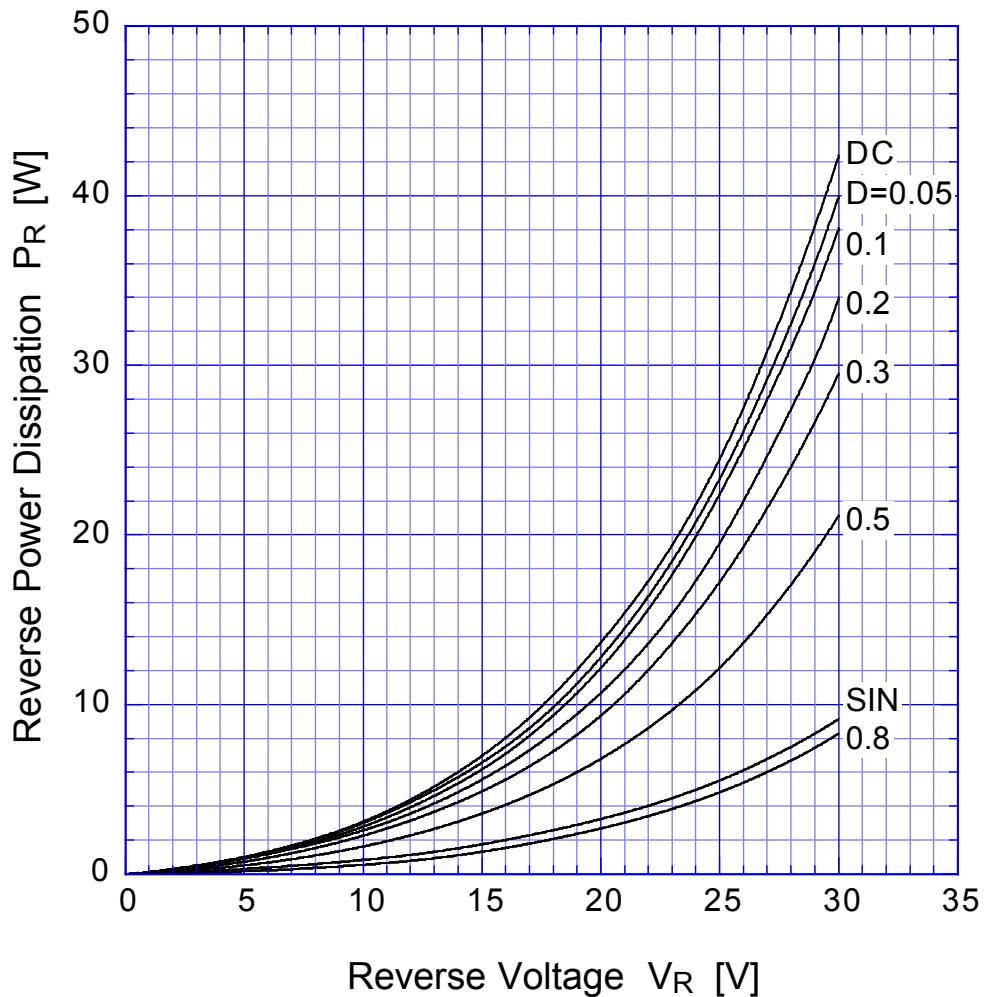




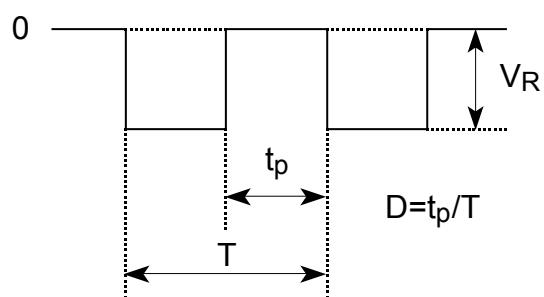
DE10PC3 Reverse Current



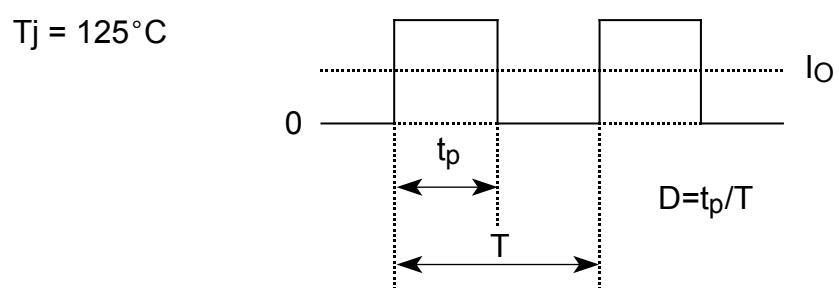
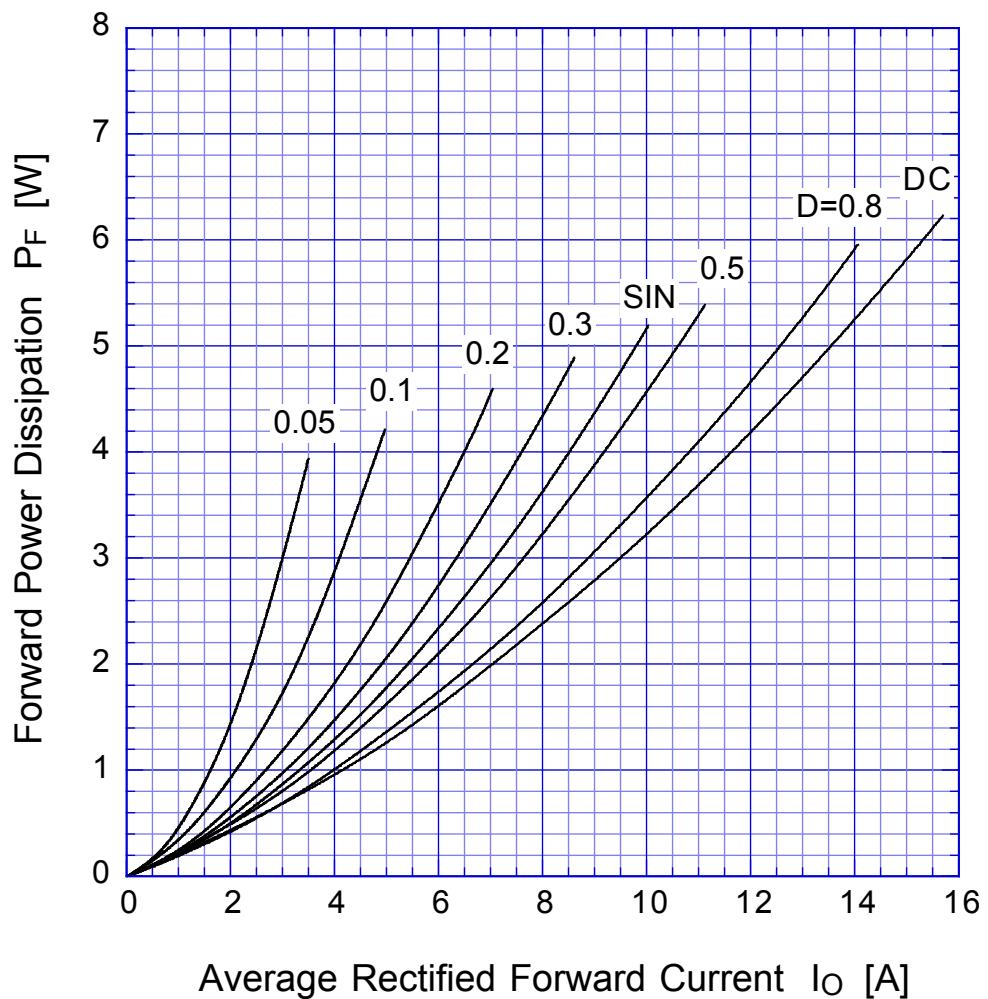
DE10PC3 Reverse Power Dissipation

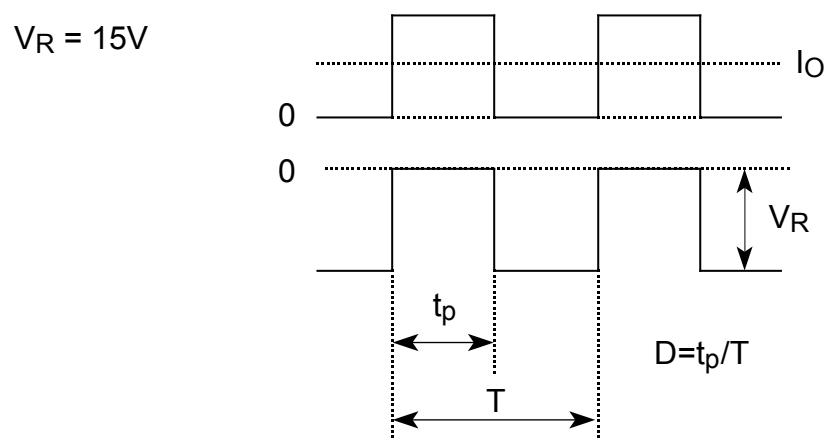
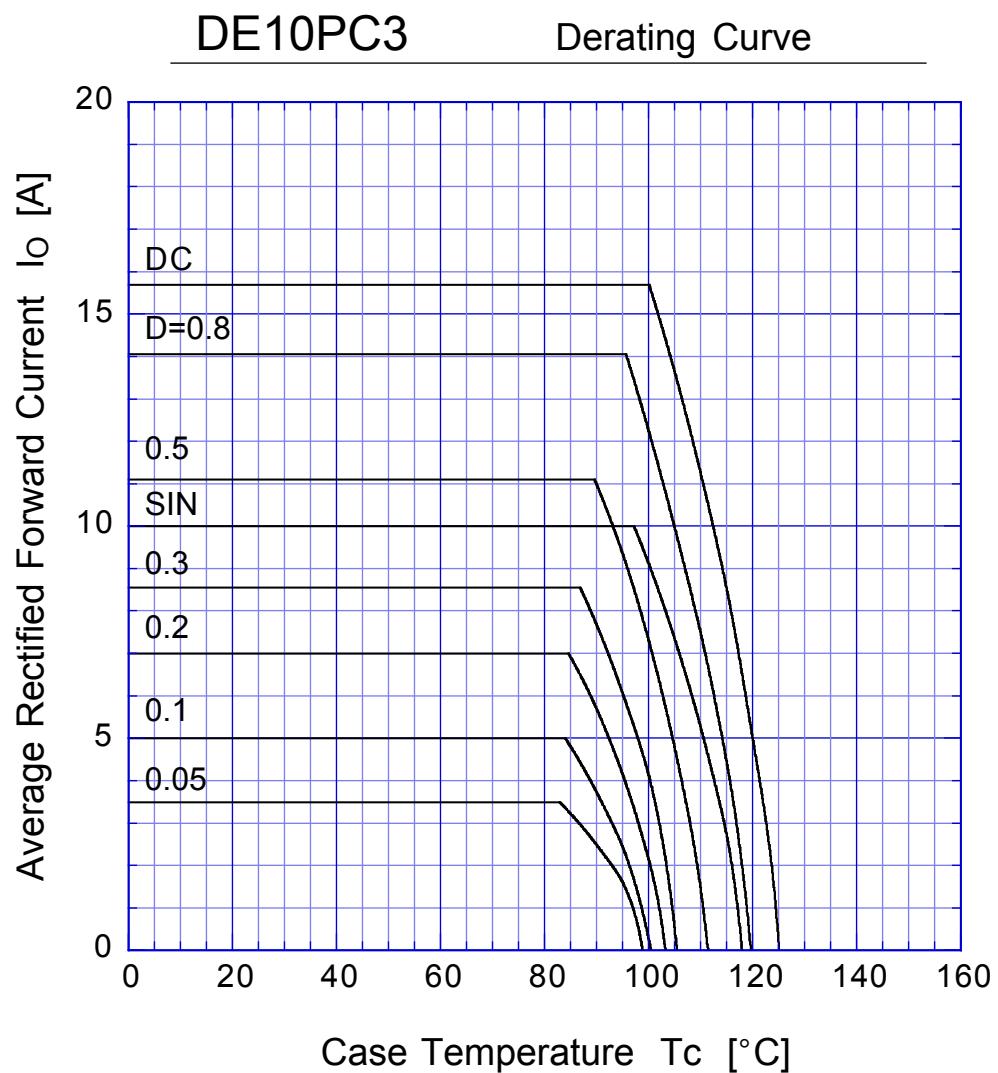


$T_j = 125^\circ\text{C}$



DE10PC3 Forward Power Dissipation





DE10PC3

Peak Surge Forward Capability

