

# SHINDENGEN

## Schottky Rectifiers (SBD)

Dual

# DF40PC3

## 30V 40A

### FEATURES

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

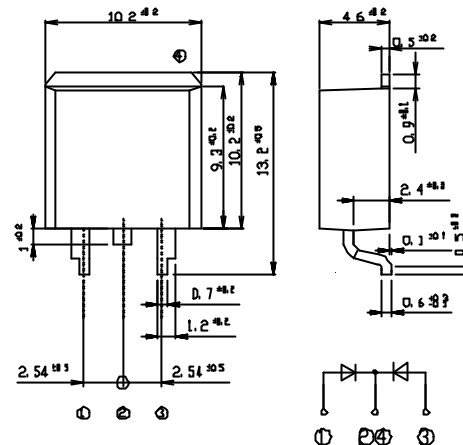
### APPLICATION

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

### OUTLINE DIMENSIONS

Case : STO-220

Unit : mm



### RATINGS

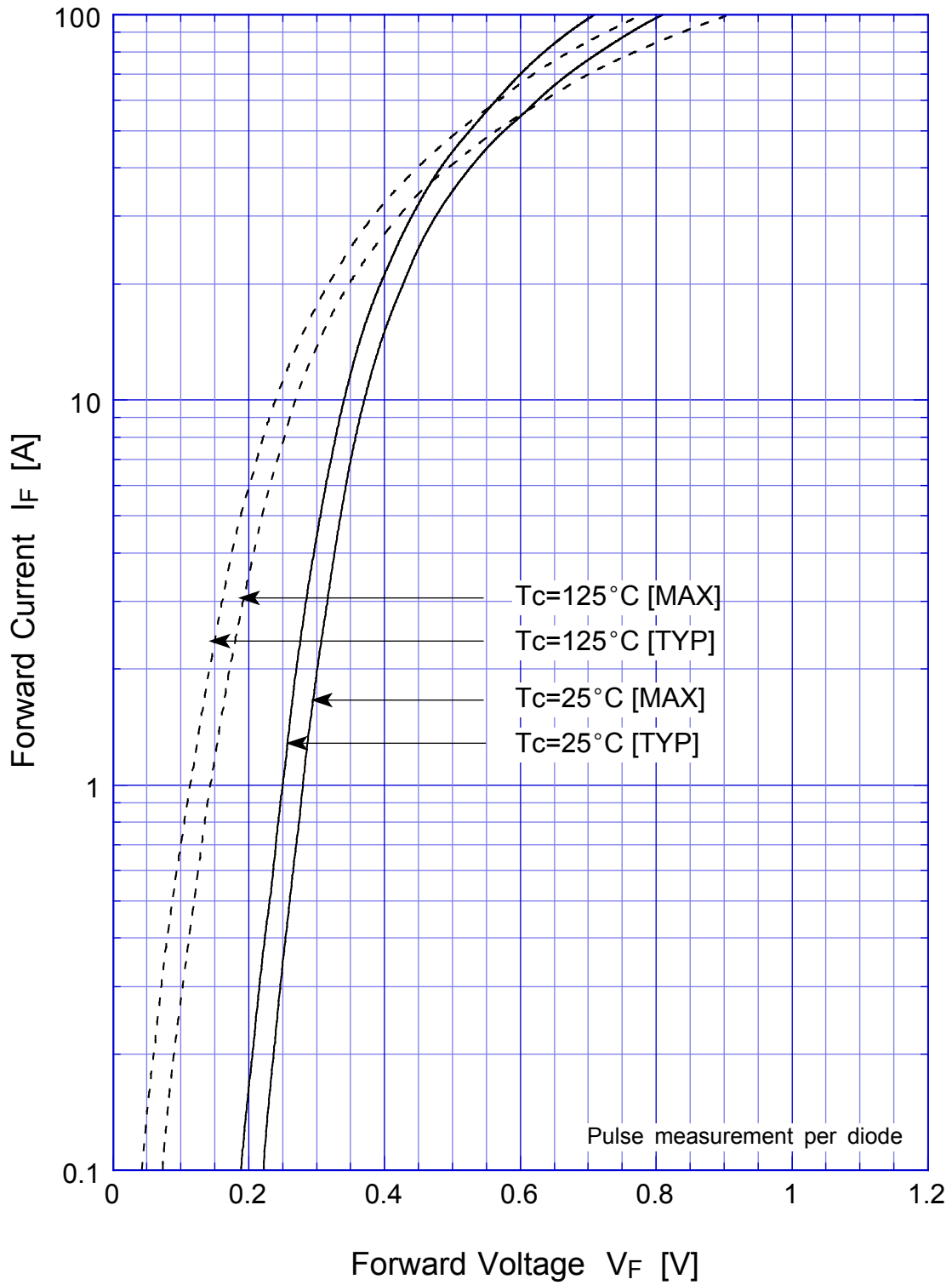
Absolute Maximum Ratings (If not specified  $T_c=25$  )

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

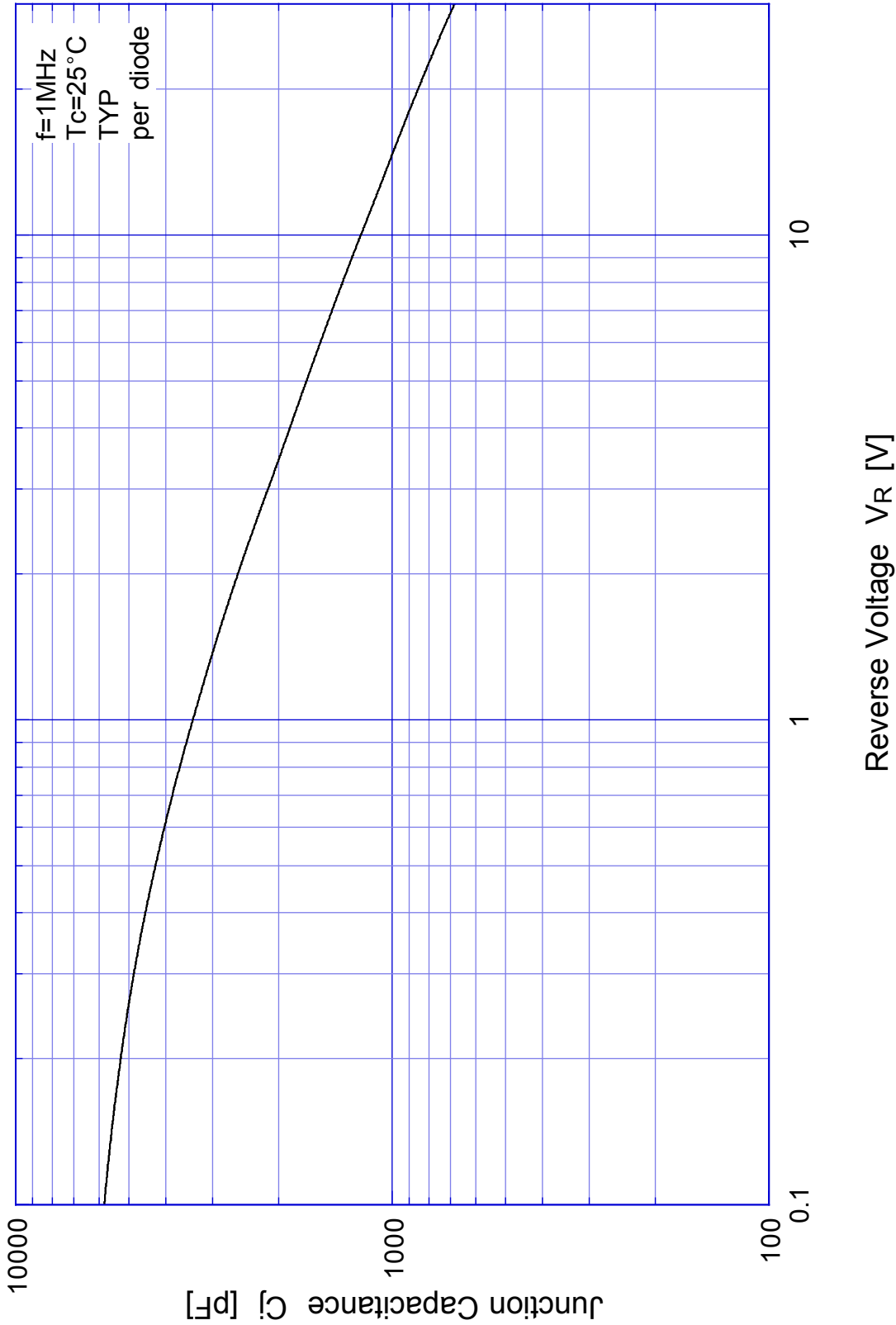
Electrical Characteristics (If not specified  $T_c=25$  )

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	$\theta_c$	junction to case	Max.0.8	/W

# DF40PC3 Forward Voltage

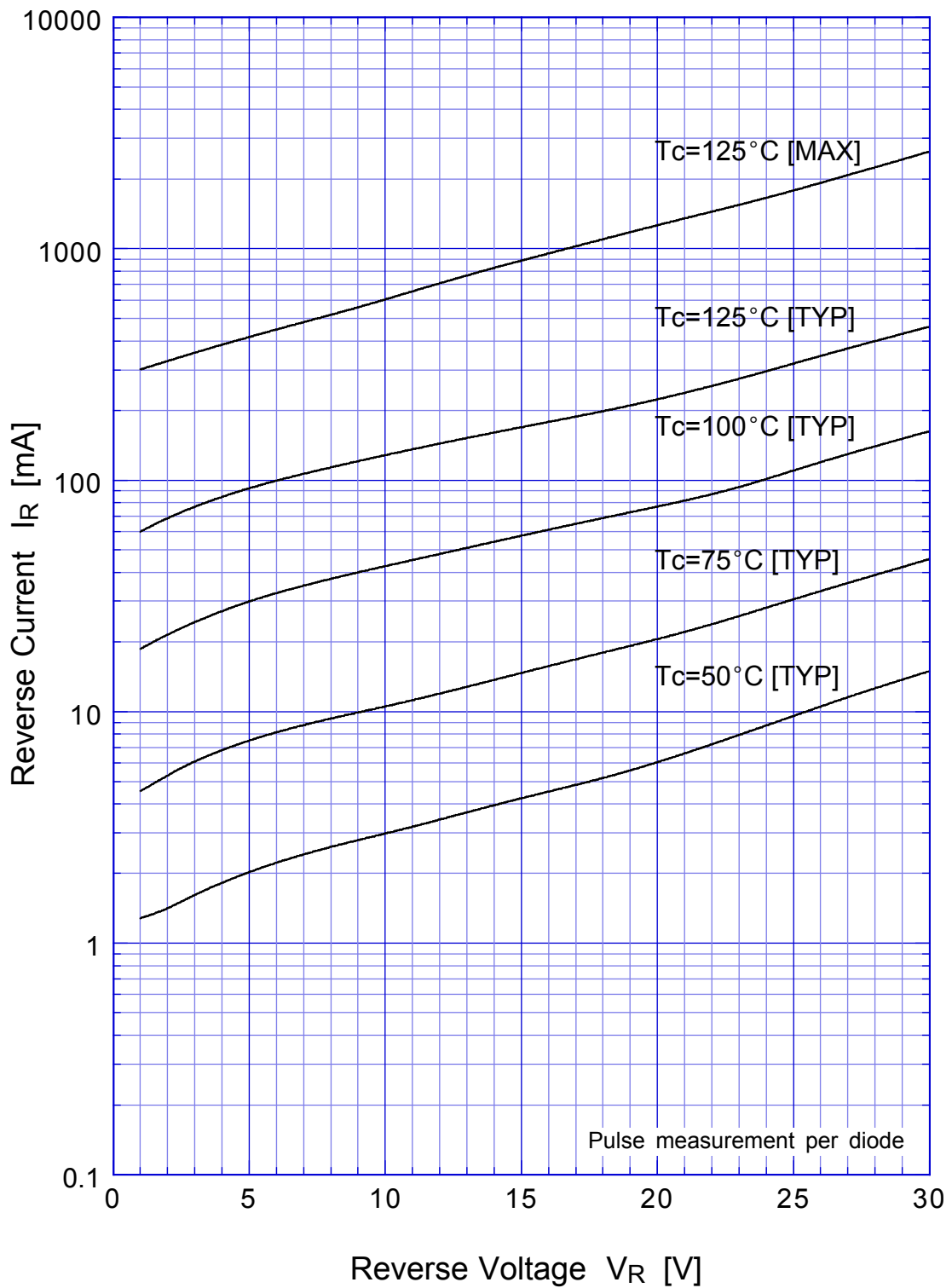


# DF40PC3 Junction Capacitance

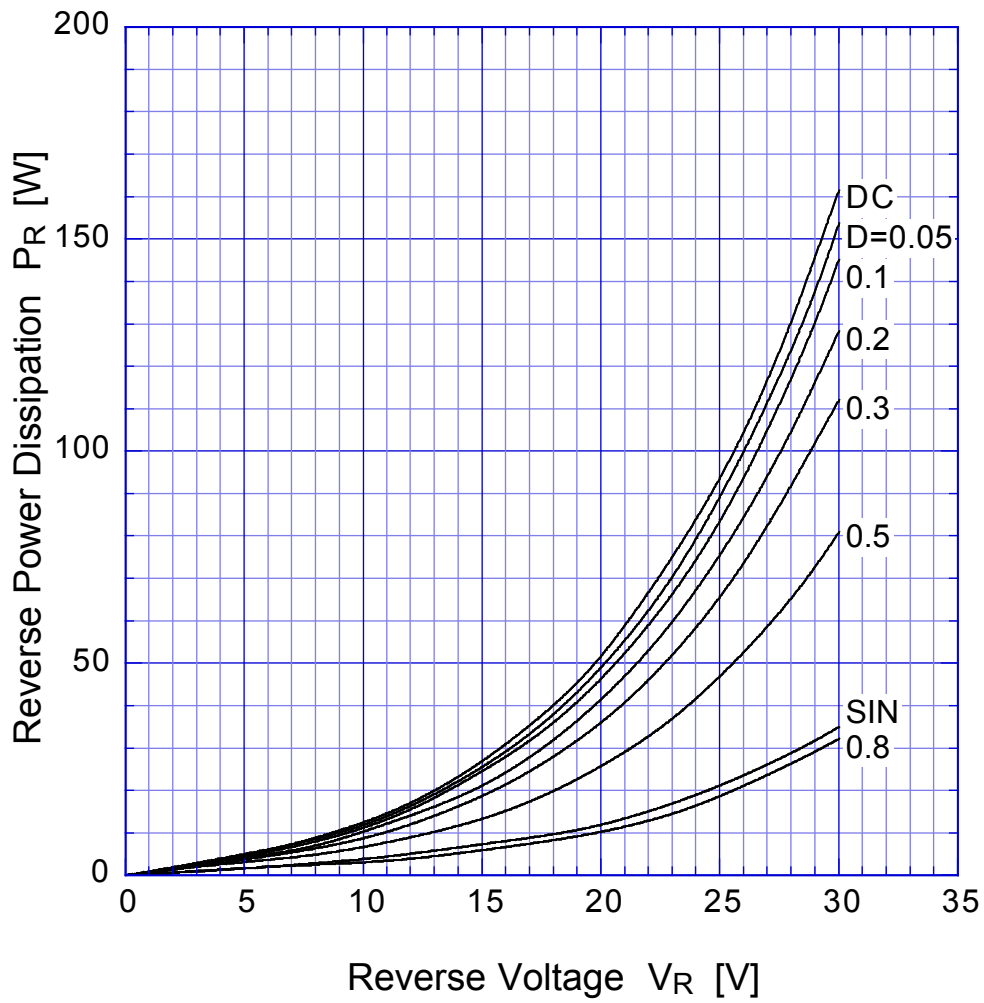


# DF40PC3

# Reverse Current



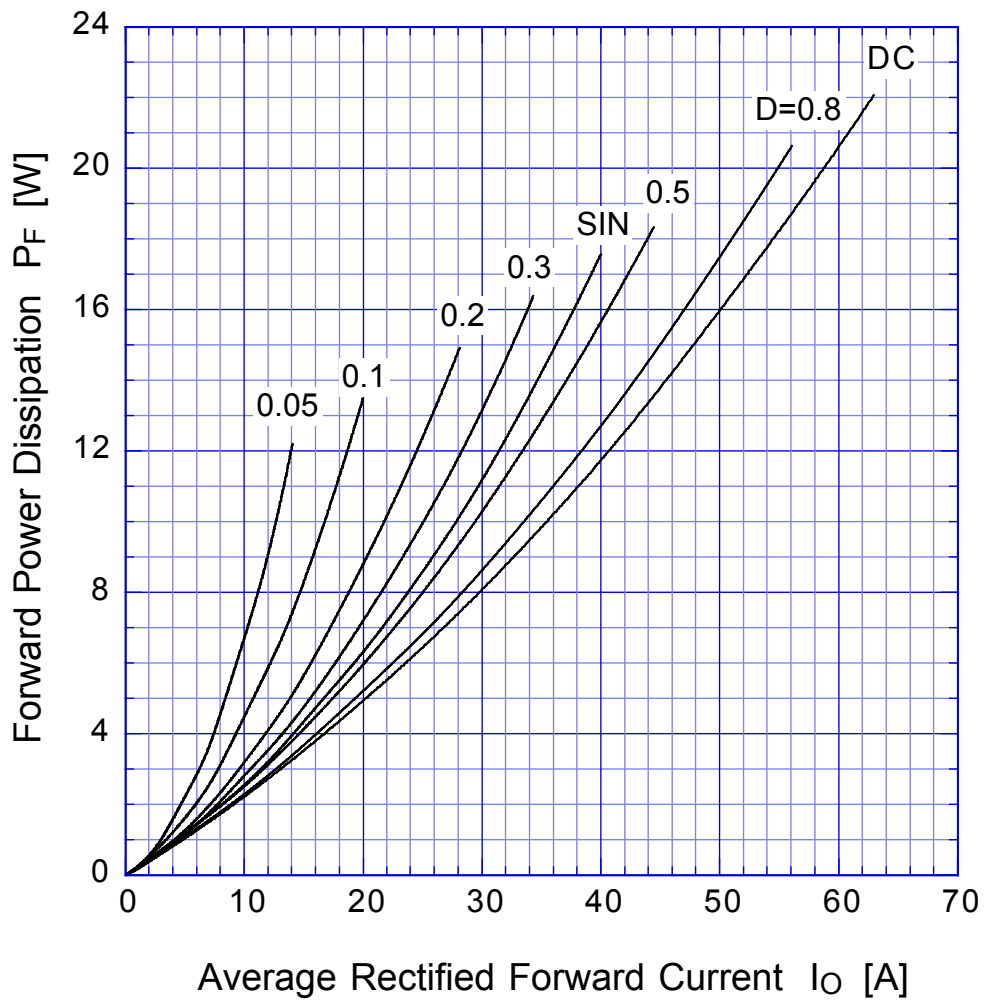
# DF40PC3 Reverse Power Dissipation



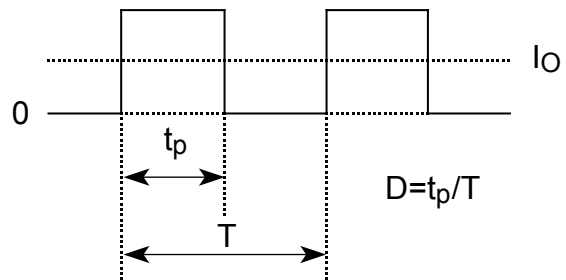
$T_j = 125^\circ\text{C}$



# DF40PC3 Forward Power Dissipation

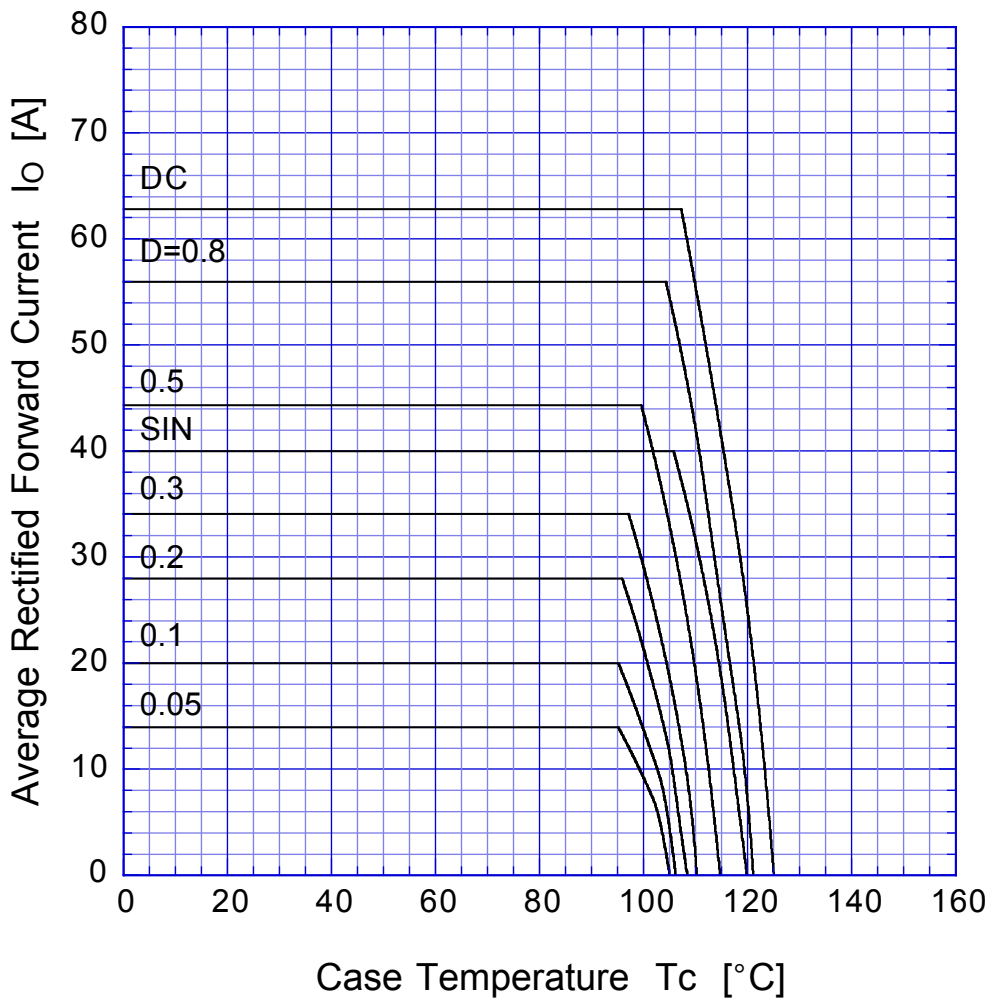


$T_j = 125^\circ\text{C}$



# DF40PC3

# Derating Curve



$V_R = 15V$



# DF40PC3 Peak Surge Forward Capability

