

# SHINDENGEN

## Super Fast Recovery Rectifiers

Single

# SF5L60

## 600V 5A

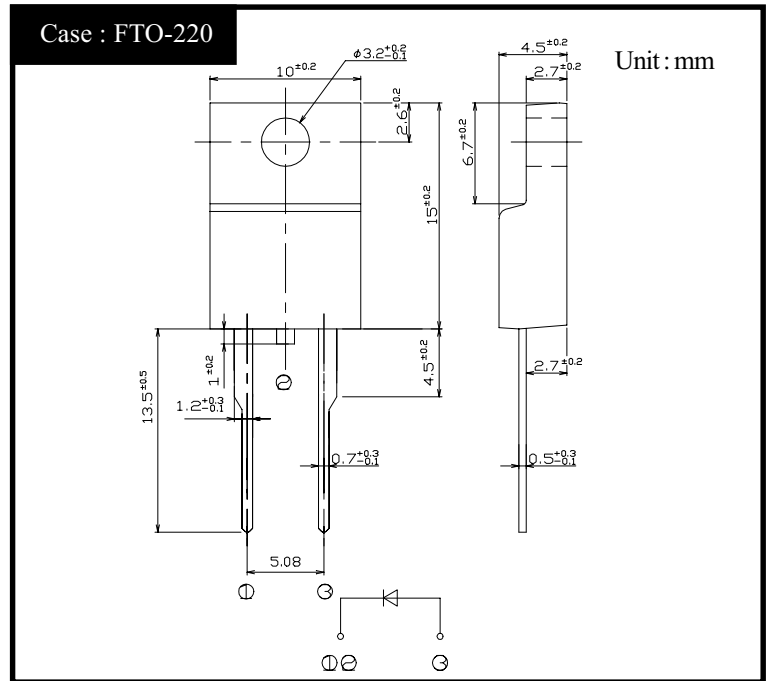
### FEATURES

- High voltage
- trr50ns
- Fully Isolated Molding
- Dielectric strength 2kV guaranteed

### APPLICATION

- PFC
- Switching power supply
- Free Wheel
- CTV+B output, lighting

### OUTLINE DIMENSIONS



### RATINGS

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

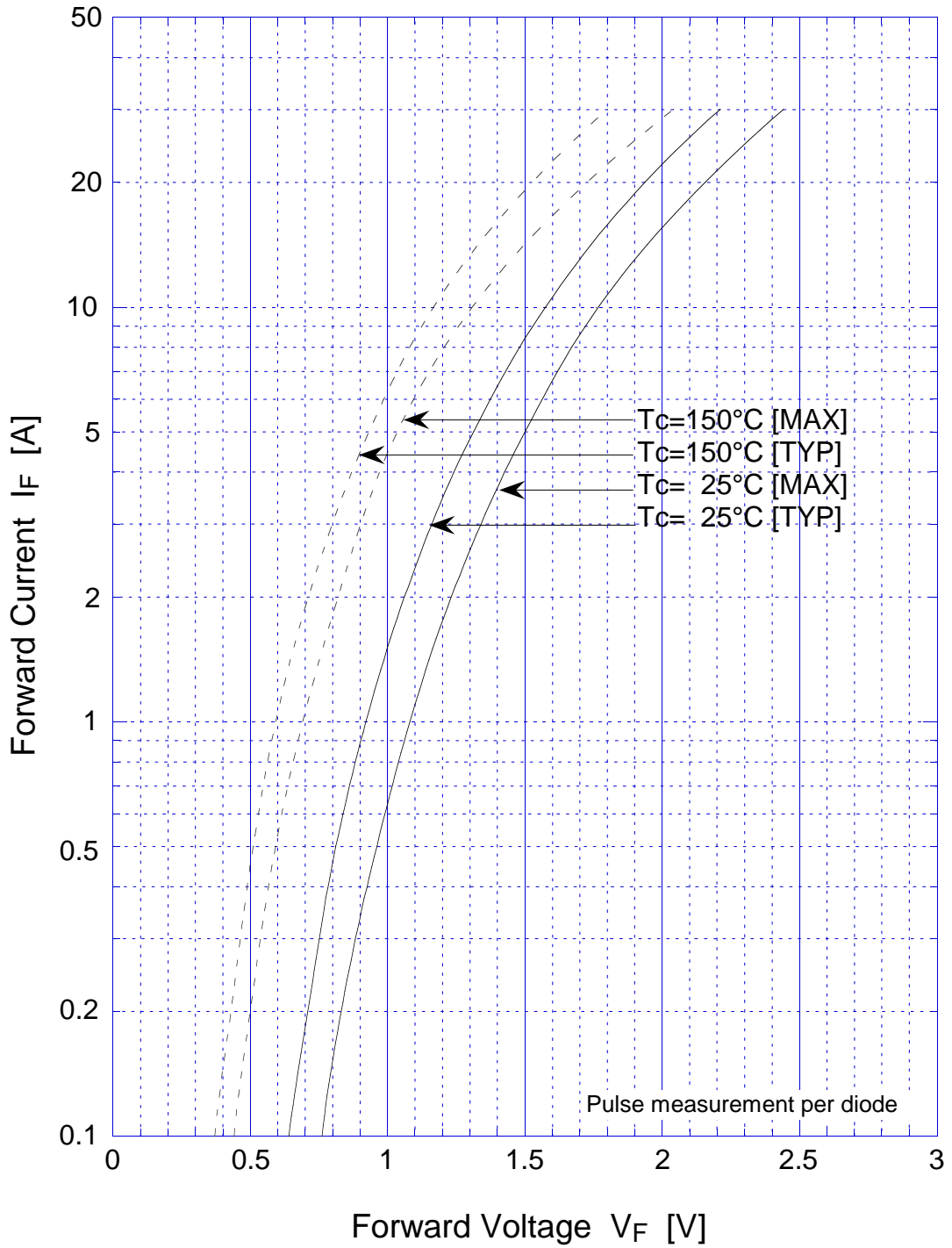
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-55~150	$^\circ\text{C}$
Operating Junction Temperature	$T_j$		150	$^\circ\text{C}$
Maximum Reverse Voltage	$V_{RM}$		600	V
Average Rectified Forward Current	$I_o$	50Hz sine wave, R-load, $T_c=131^\circ\text{C}$	5	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	100	A
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque:0.3N·m)	0.5	N·m

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

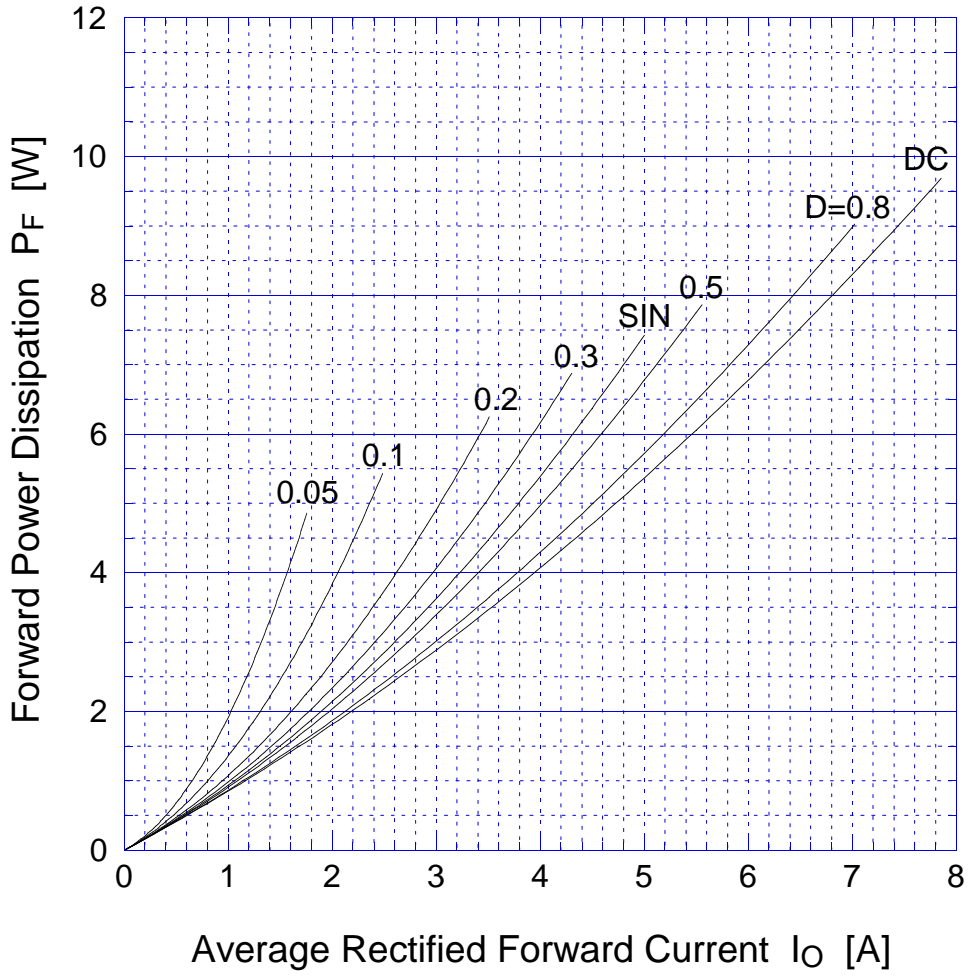
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=5\text{A}$ , Pulse measurement	Max.1.5	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement	Max.10	$\mu\text{A}$
Reverse Recovery Time	$t_{rr}$	$I_F=0.5\text{A}$ , $I_R=1\text{A}$	Max.50	ns
Thermal Resistance	$\theta_{jc}$	junction to case	Max.2.5	$^\circ\text{C}/\text{W}$

# SF5L60

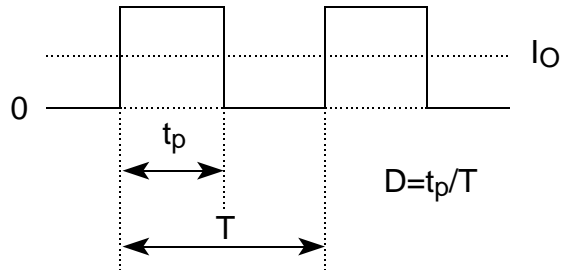
# Forward Voltage



# SF5L60 Forward Power Dissipation

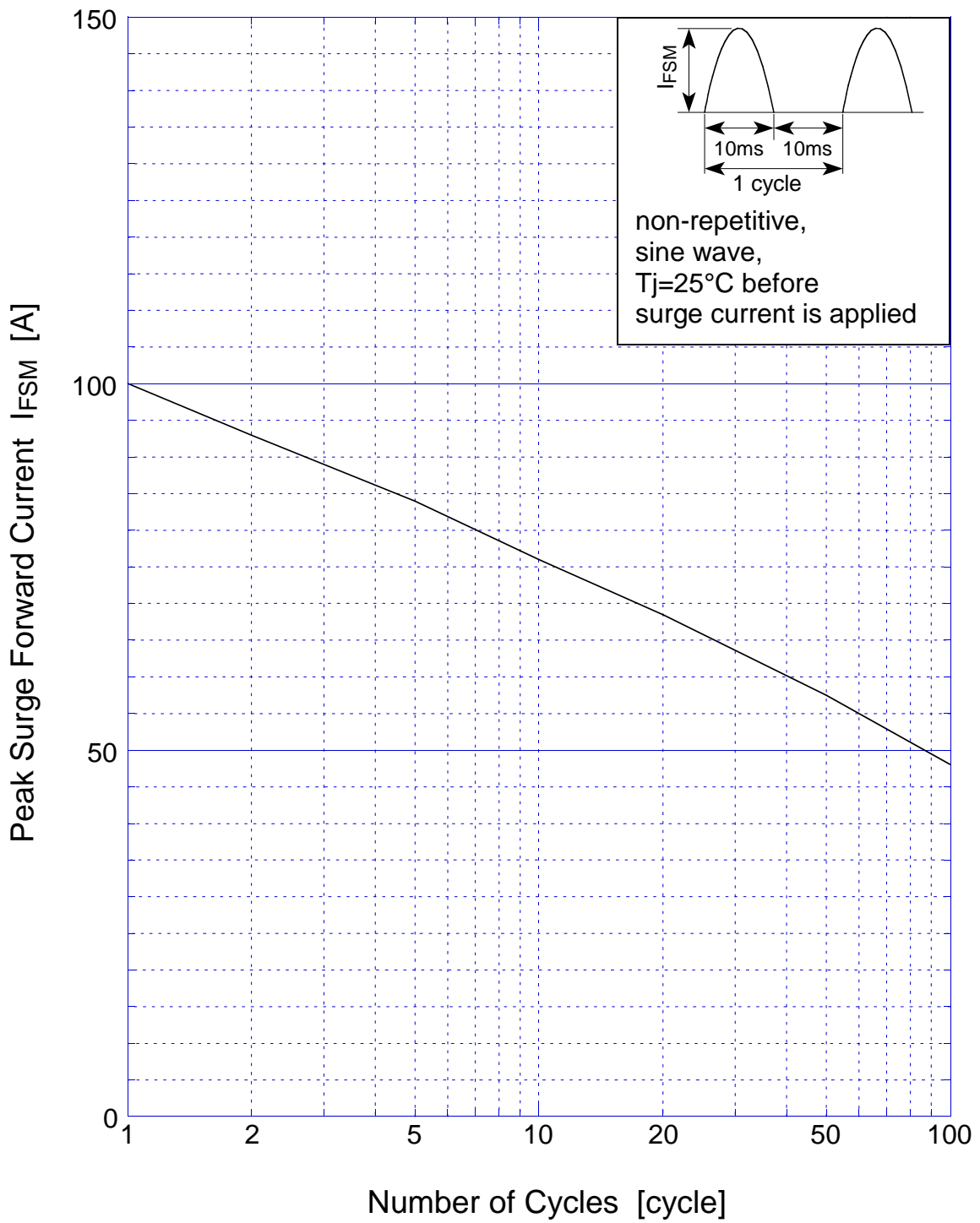


$T_j = 150^\circ\text{C}$



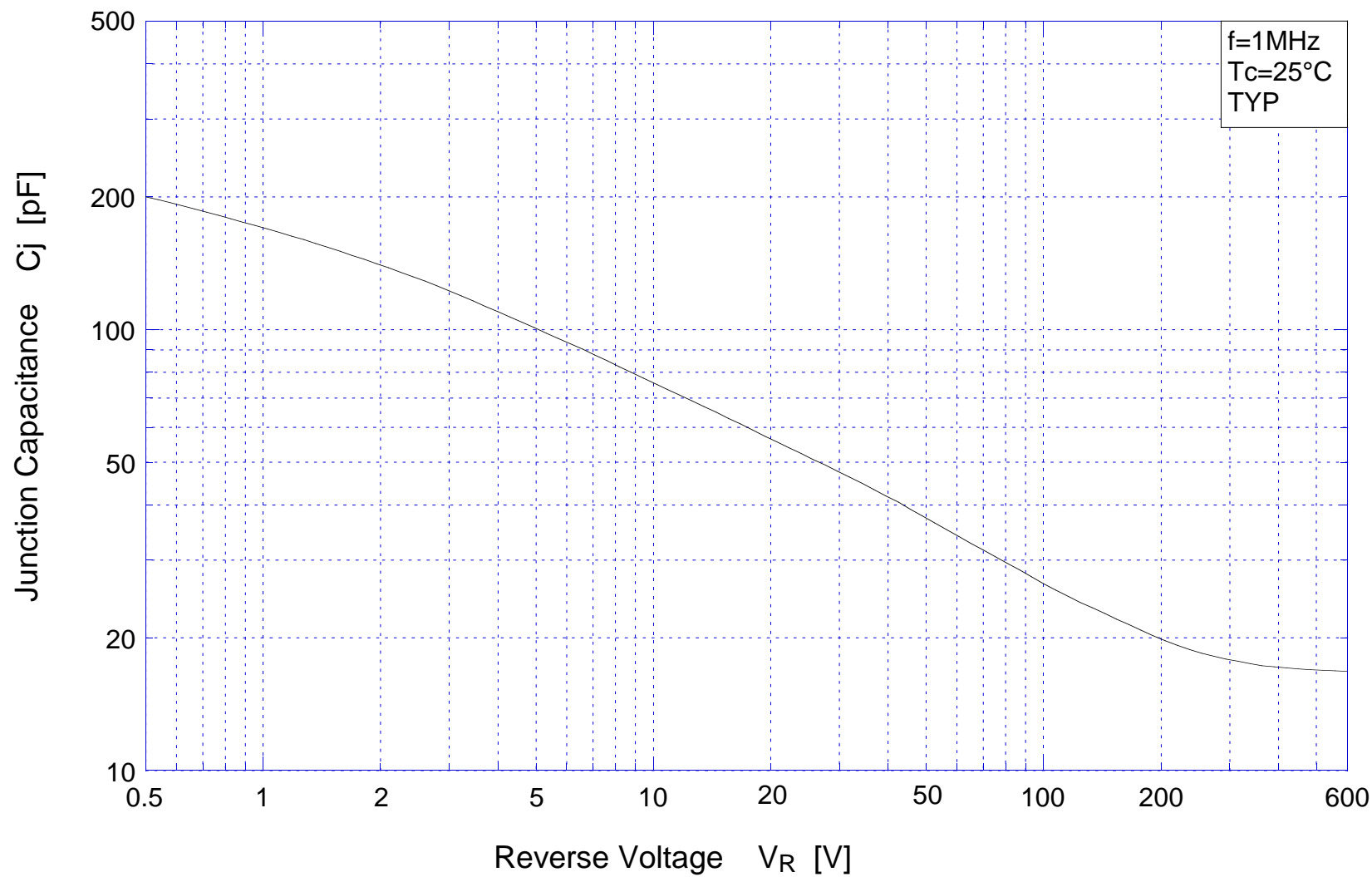
# SF5L60

# Peak Surge Forward Capability



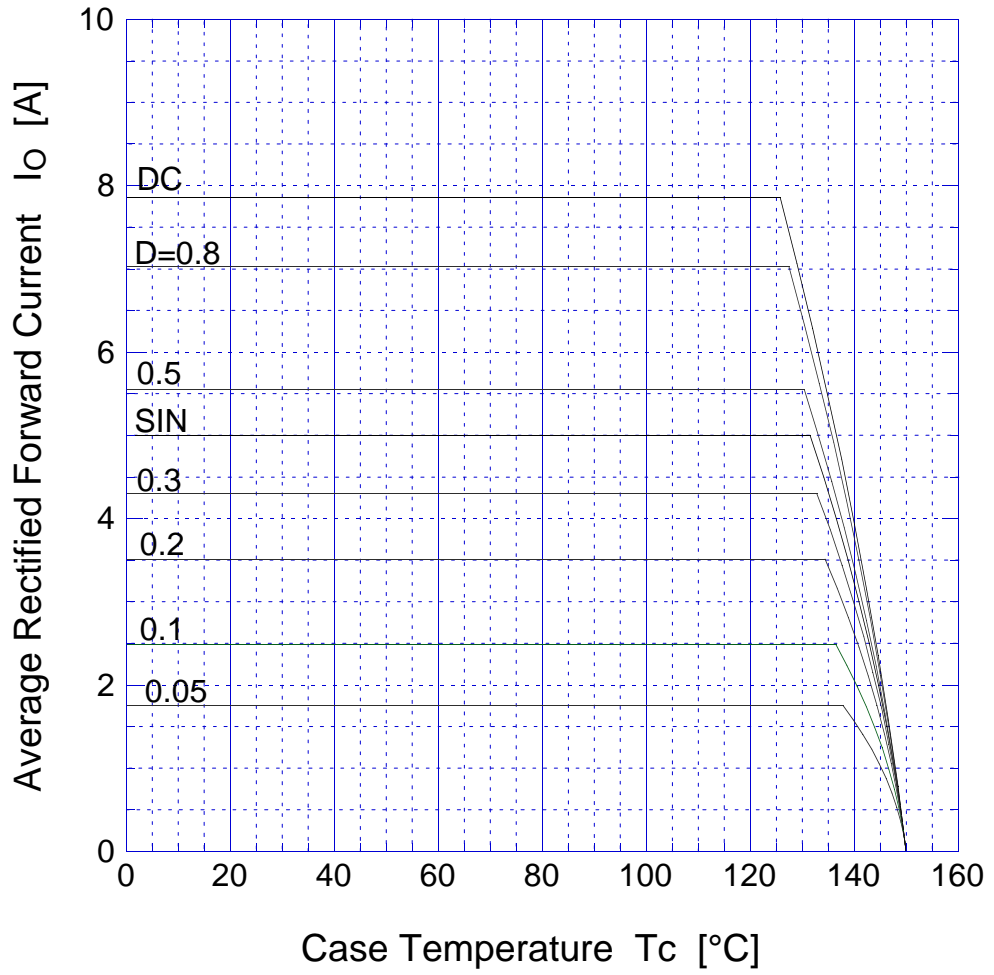
SF5L60

Junction Capacitance



# SF5L60

# Derating Curve



$$V_R = V_{RM}$$

