

# S60SC4M

## 40V 60A

### FEATURES

- Tj150°C
- P<sub>RRSM</sub> avalanche guaranteed
- Small  $\theta_{jc}$
- High current capacity

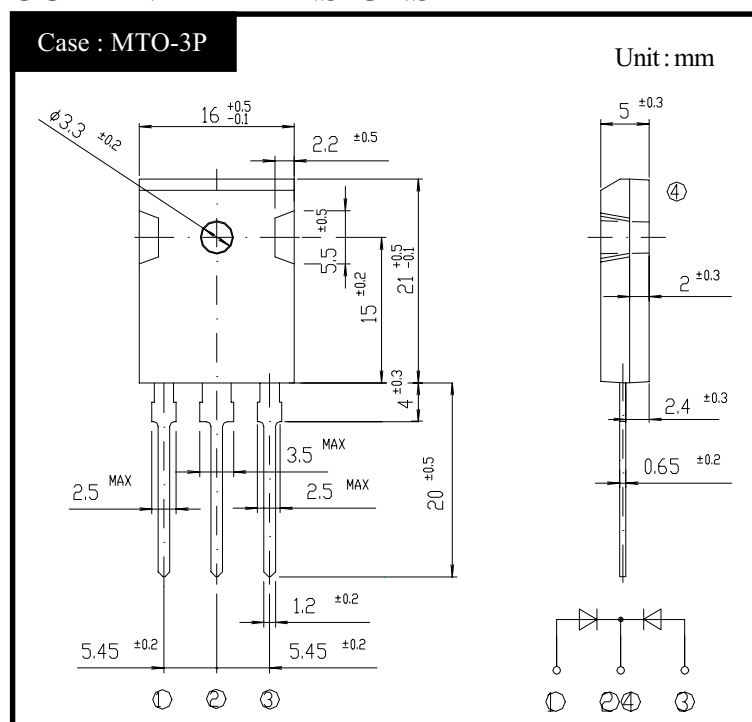
### APPLICATION

- Switching power supply
- DC/DC converter
- Home Appliances, Office Equipment
- Telecommunication

### OUTLINE DIMENSIONS

Case : MTO-3P

Unit : mm



### RATINGS

#### ● Absolute Maximum Ratings (If not specified T<sub>c</sub>=25°C)

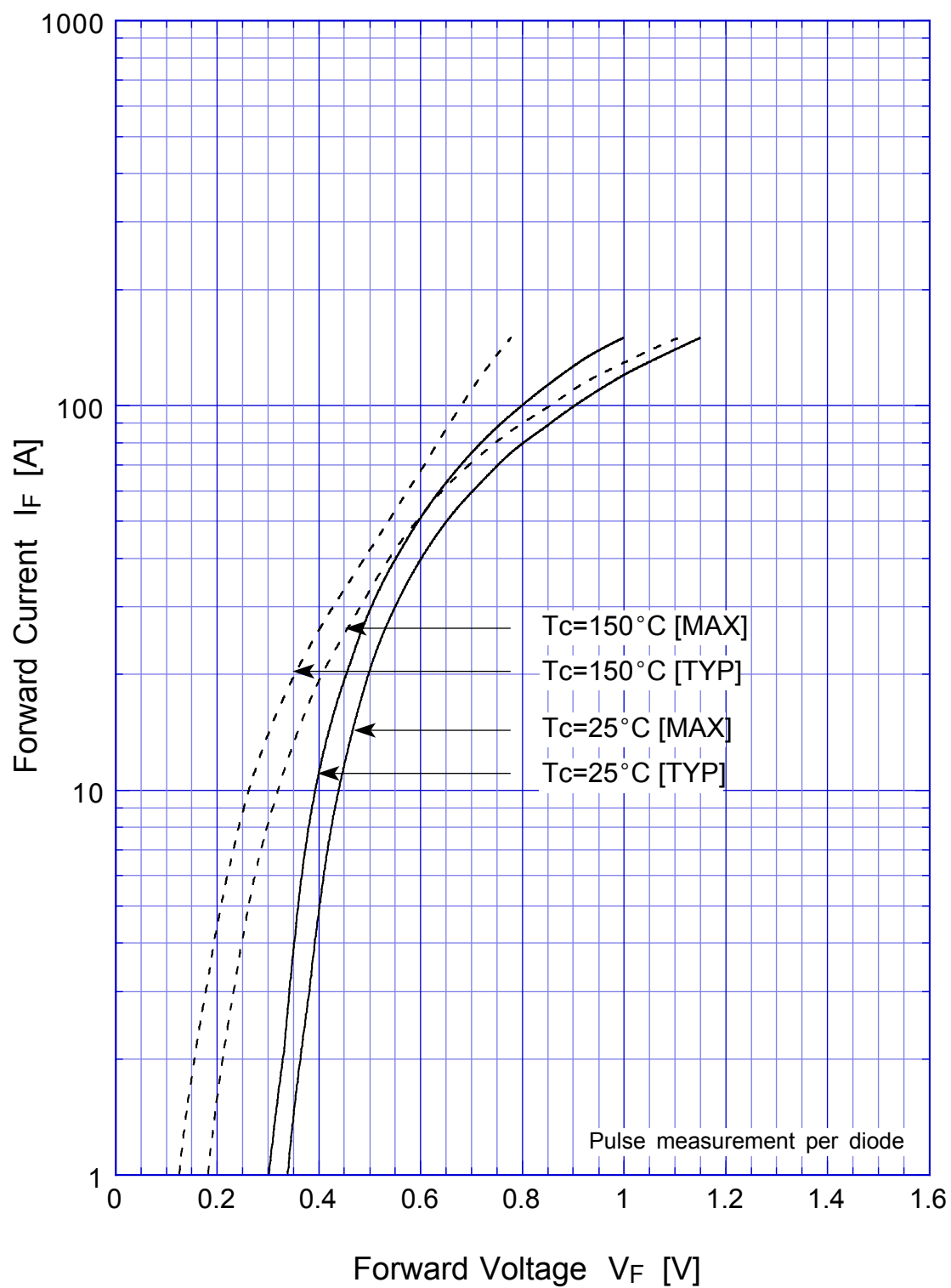
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-40~150	°C
Operating Junction Temperature	T <sub>j</sub>		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		40	V
Repetitive Peak Surge Reverse Voltage	V <sub>RRSM</sub>	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load, Rating for each diode I <sub>O</sub> /2, T <sub>c</sub> =126°C	60	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =125°C	500	A
Repetitive Peak Surge Reverse Power	P <sub>RRSM</sub>	Pulse width 10 μs, Rating of per diode, T <sub>j</sub> =25°C	1000	W
Mounting Torque	TOR	(Recommended torque: 0.5N·m)	0.8	N·m

#### ● Electrical Characteristics (If not specified T<sub>c</sub>=25°C)

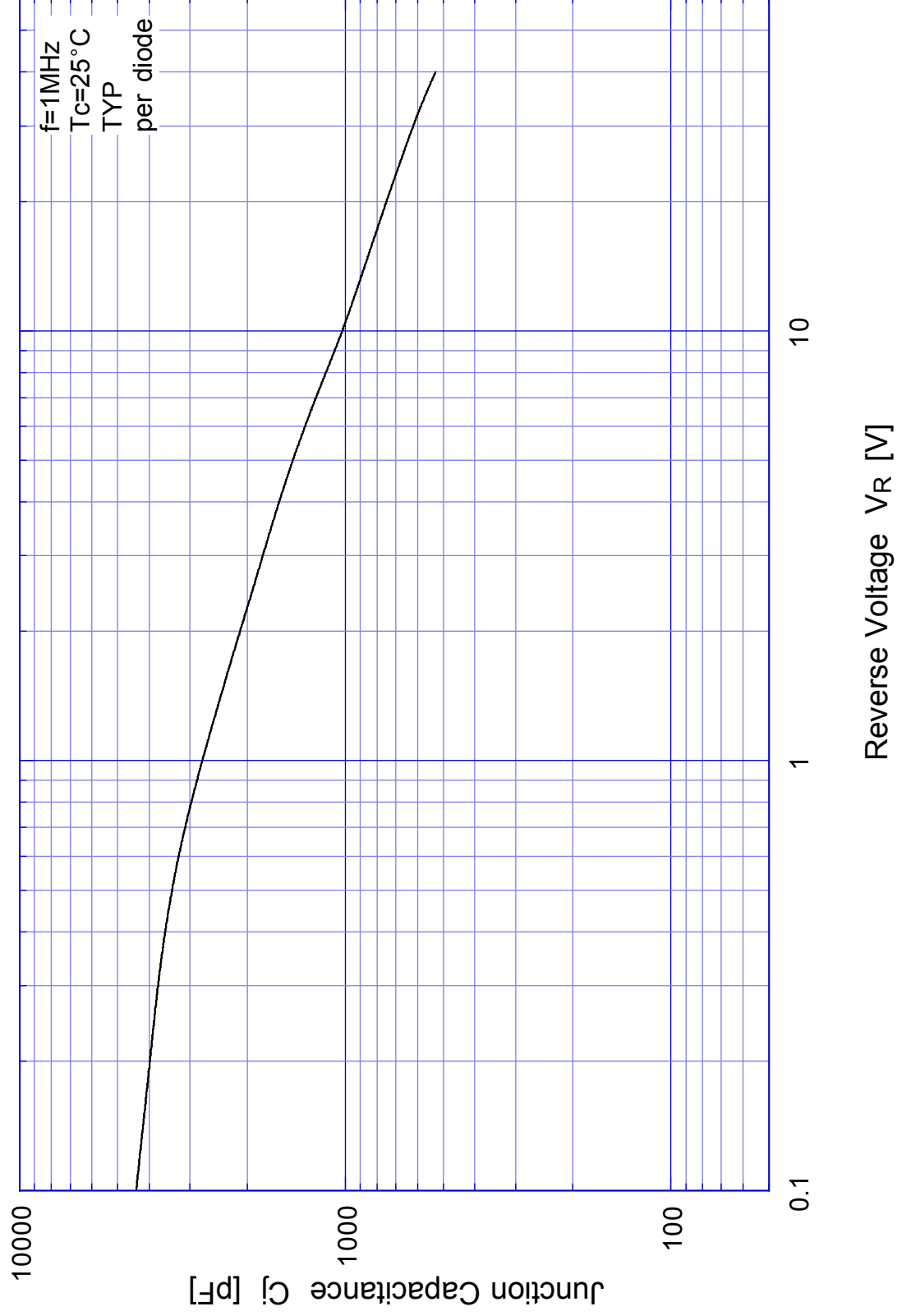
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =30A, Pulse measurement, Rating of per diode	Max.0.55	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max.25	mA
Junction Capacitance	C <sub>j</sub>	f=1MHz, V <sub>R</sub> =10V, Rating of per diode	Typ.1000	pF
Thermal Resistance	$\theta_{jc}$	junction to case	Max.0.5	°C/W

# S60SC4M

## Forward Voltage

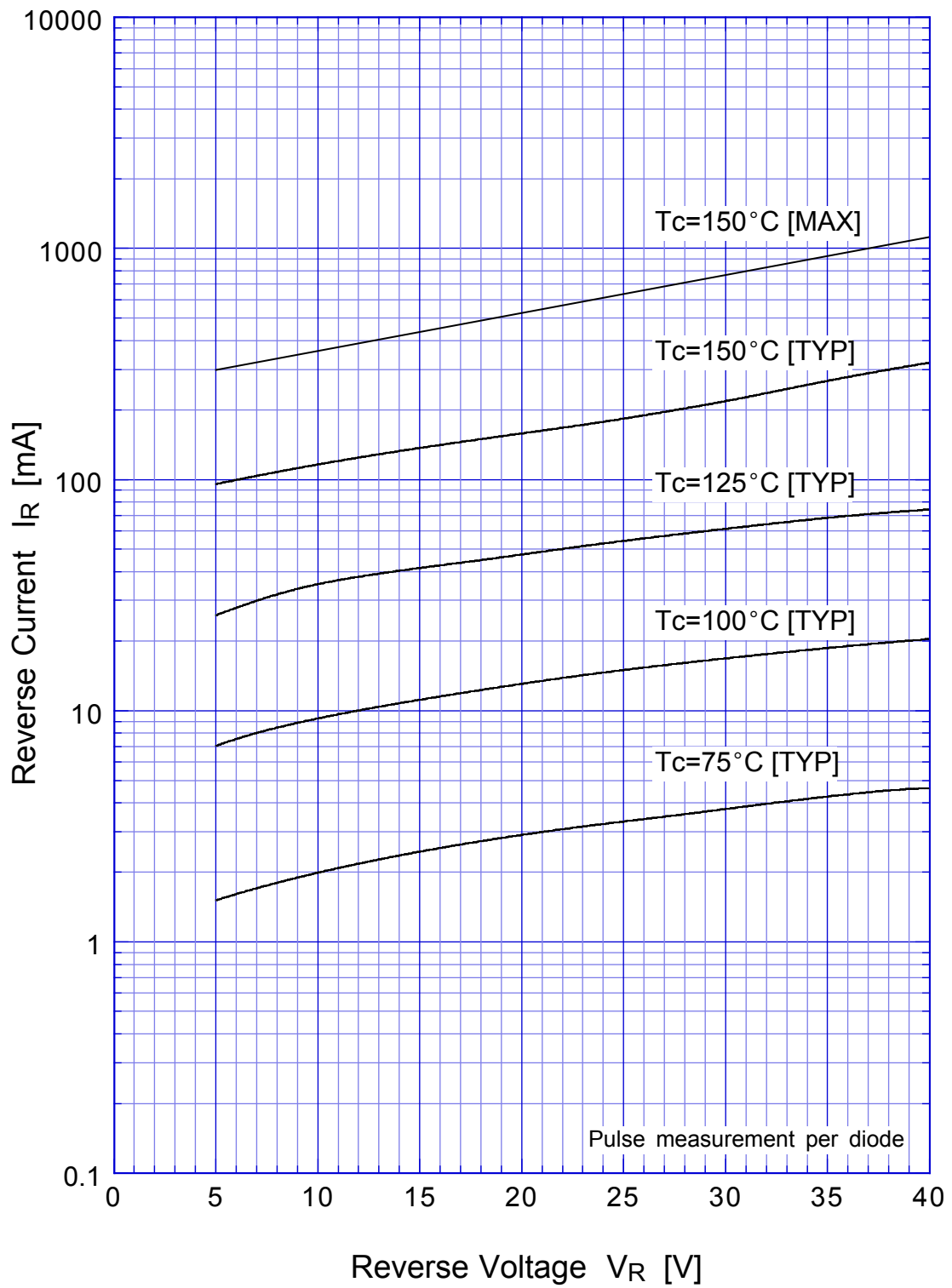


# S60SC4M Junction Capacitance

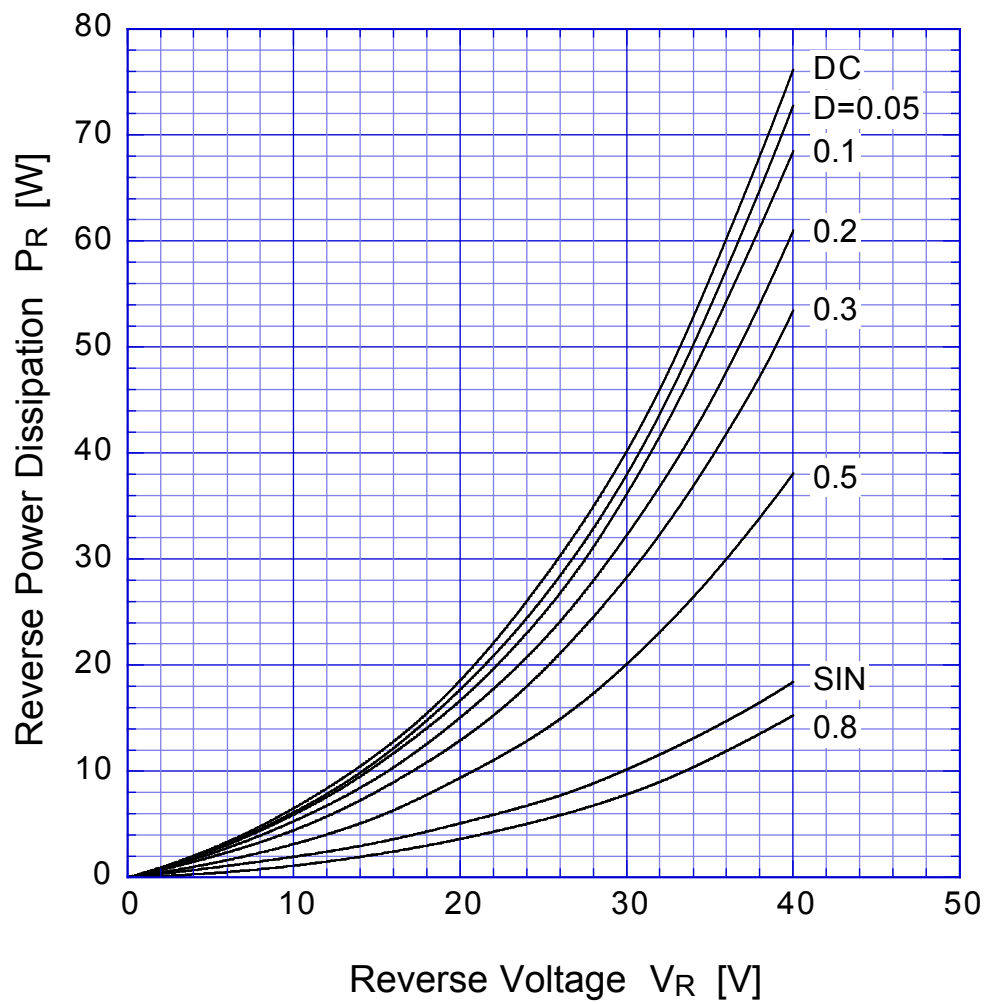


# S60SC4M

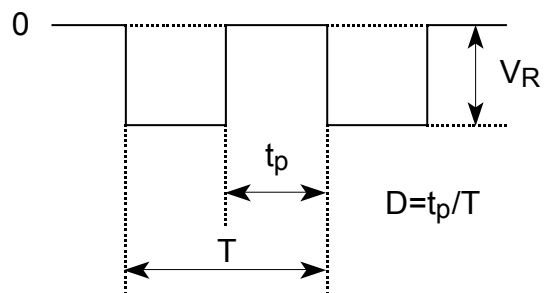
## Reverse Current



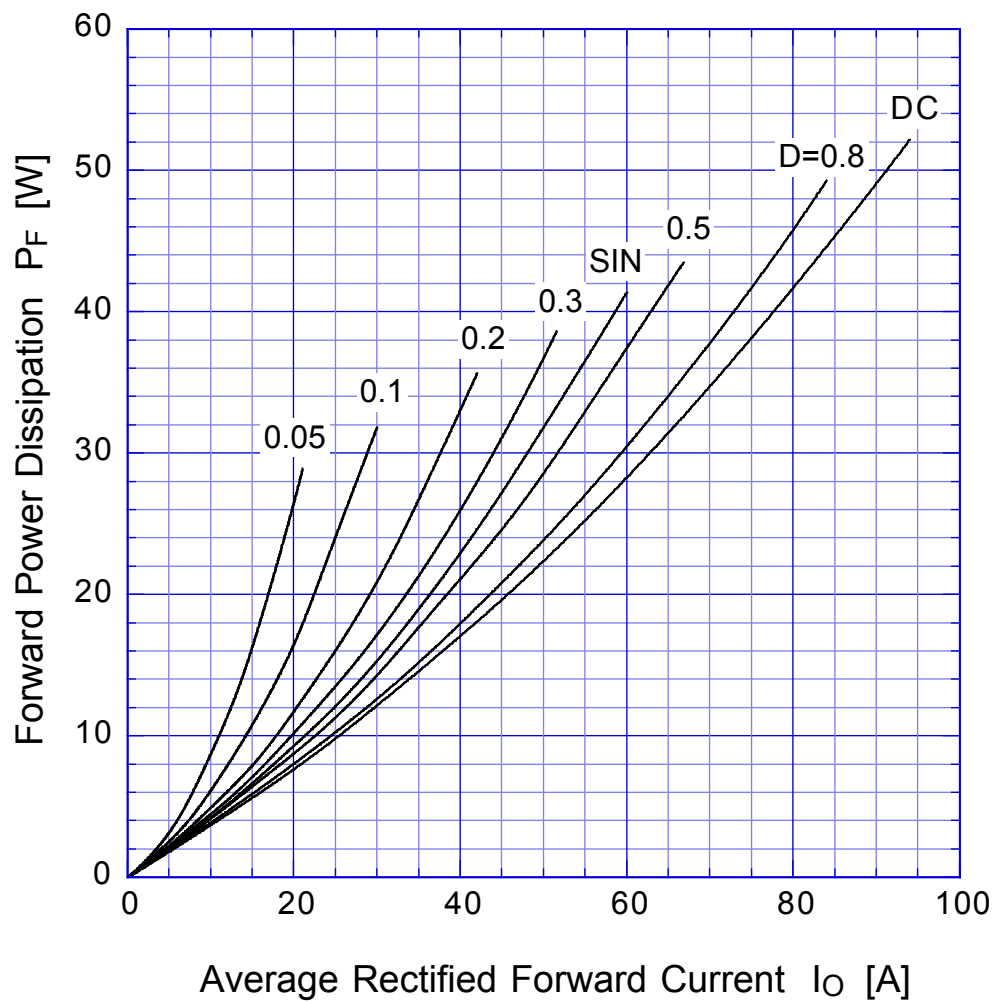
## S60SC4M Reverse Power Dissipation



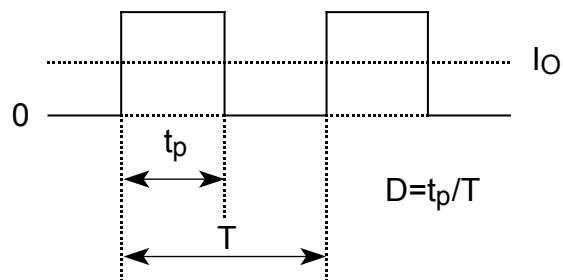
$T_j = 150^\circ\text{C}$



## S60SC4M Forward Power Dissipation

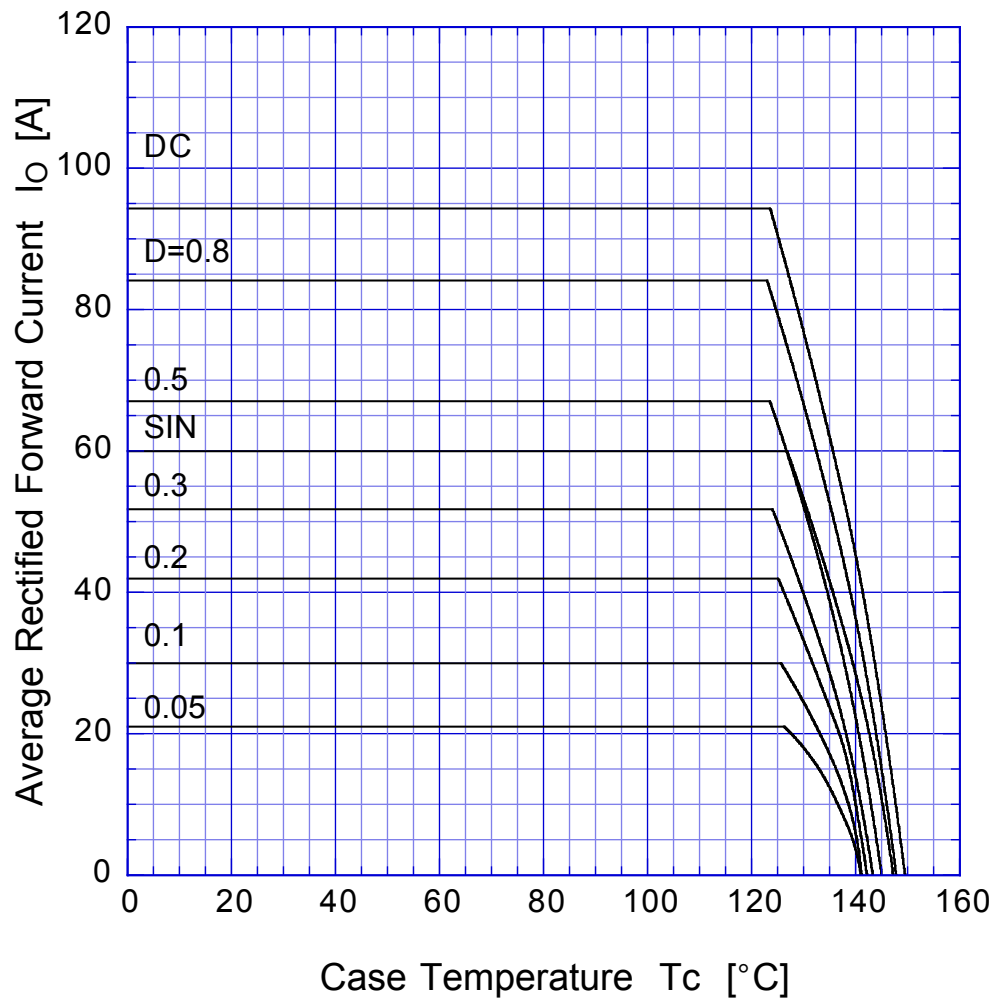


$T_j = 150^\circ\text{C}$

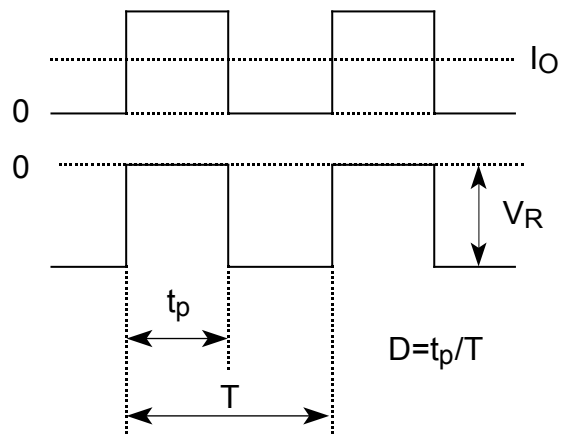


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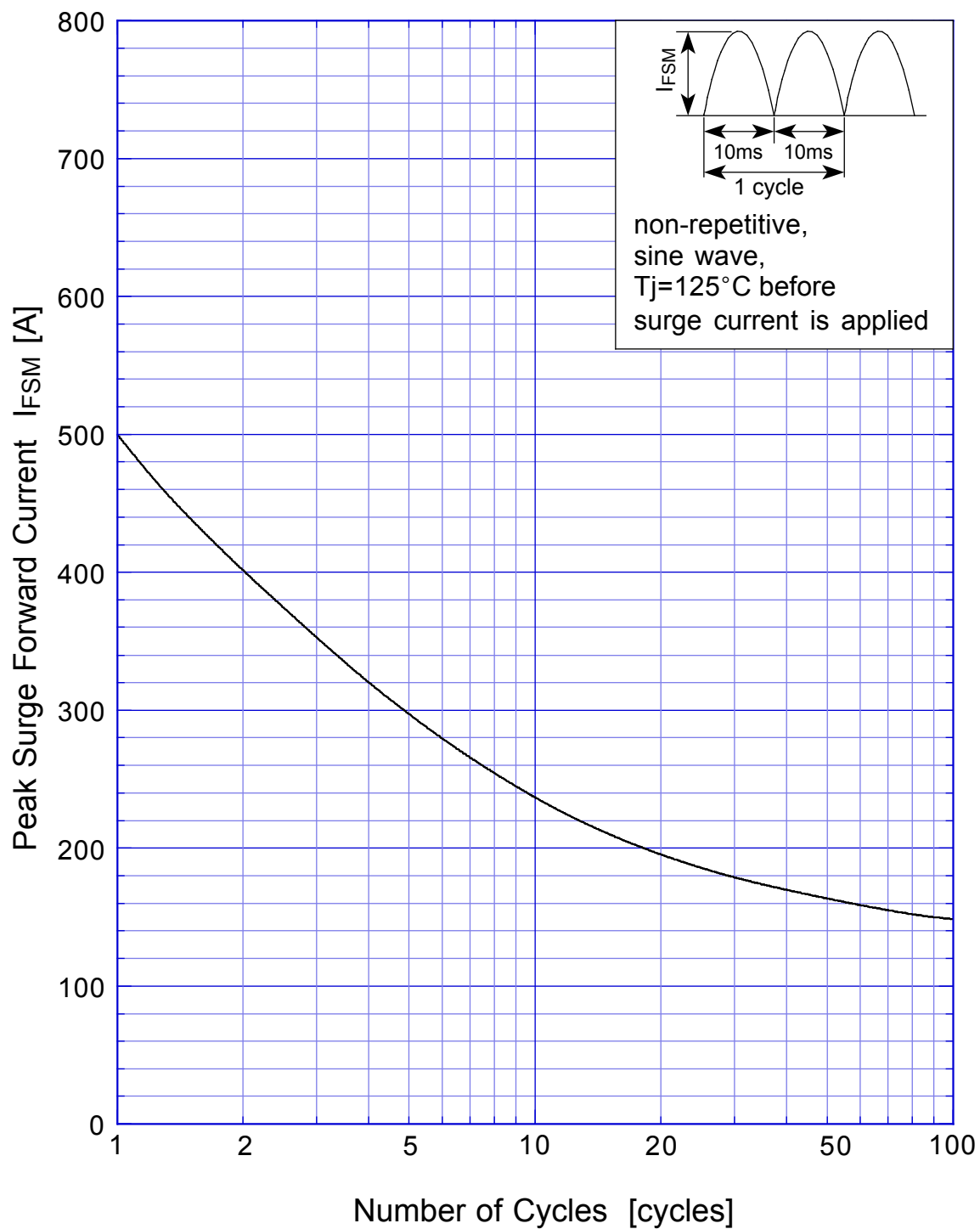
## Derating Curve



$V_R = 20V$

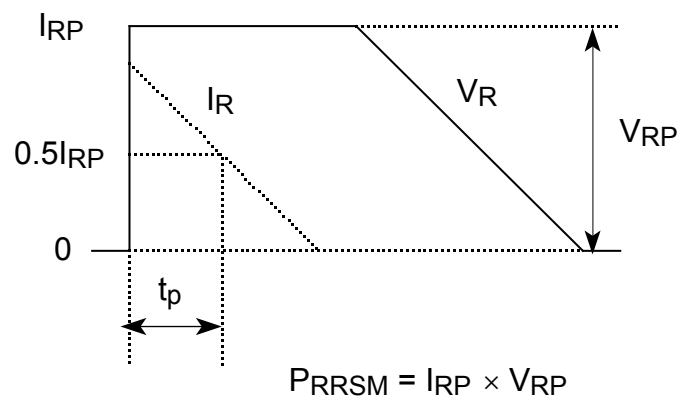
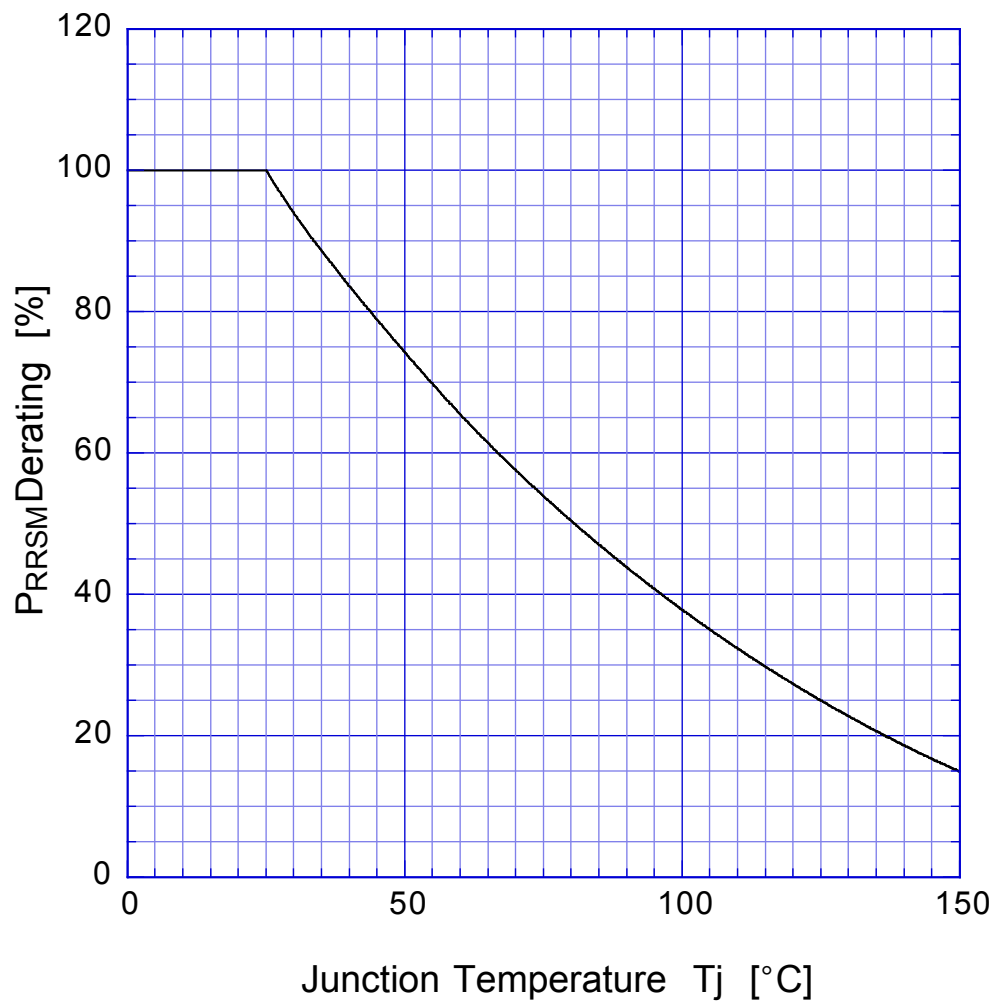


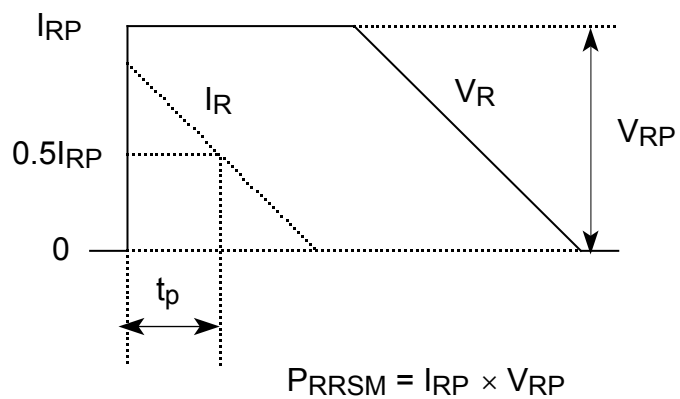
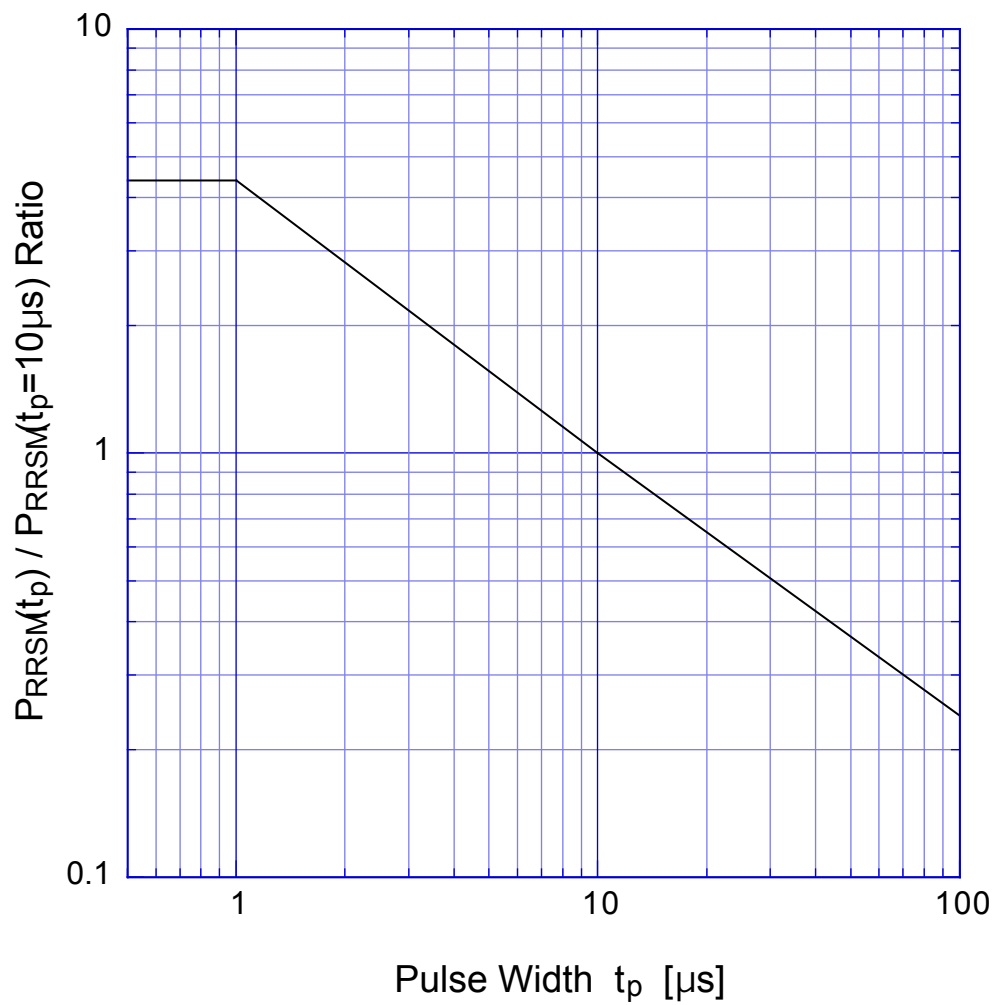
## S60SC4M Peak Surge Forward Capability





## SBD Repetitive Surge Reverse Power Derating Curve





This datasheet has been download from:

[www.datasheetcatalog.com](http://www.datasheetcatalog.com)

Datasheets for electronics components.