

# SHINDENGEN

## Schottky Rectifiers (SBD)

Dual

# S25SC6M

## 60V 25A

### FEATURES

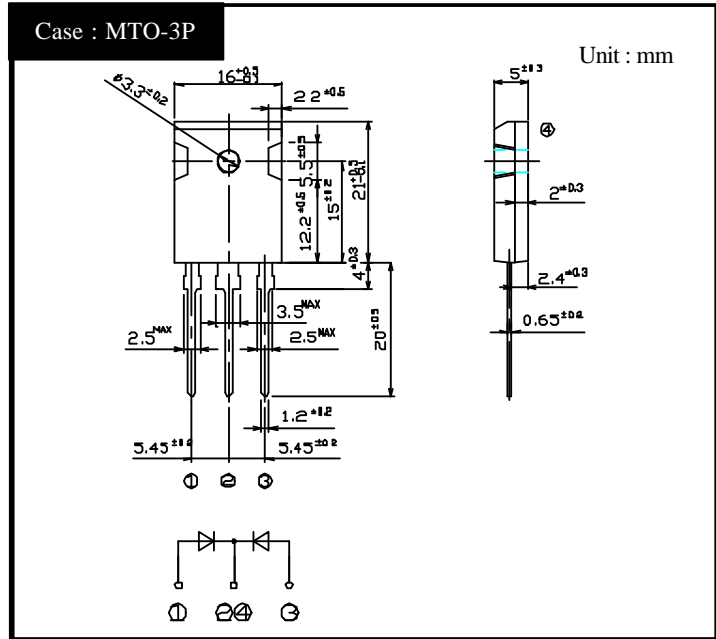
- Tj150
- $P_{RRSM}$  avalanche guaranteed
- Small jc
- High current capacity

### APPLICATION

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

### OUTLINE DIMENSIONS

Case : MTO-3P



### RATINGS

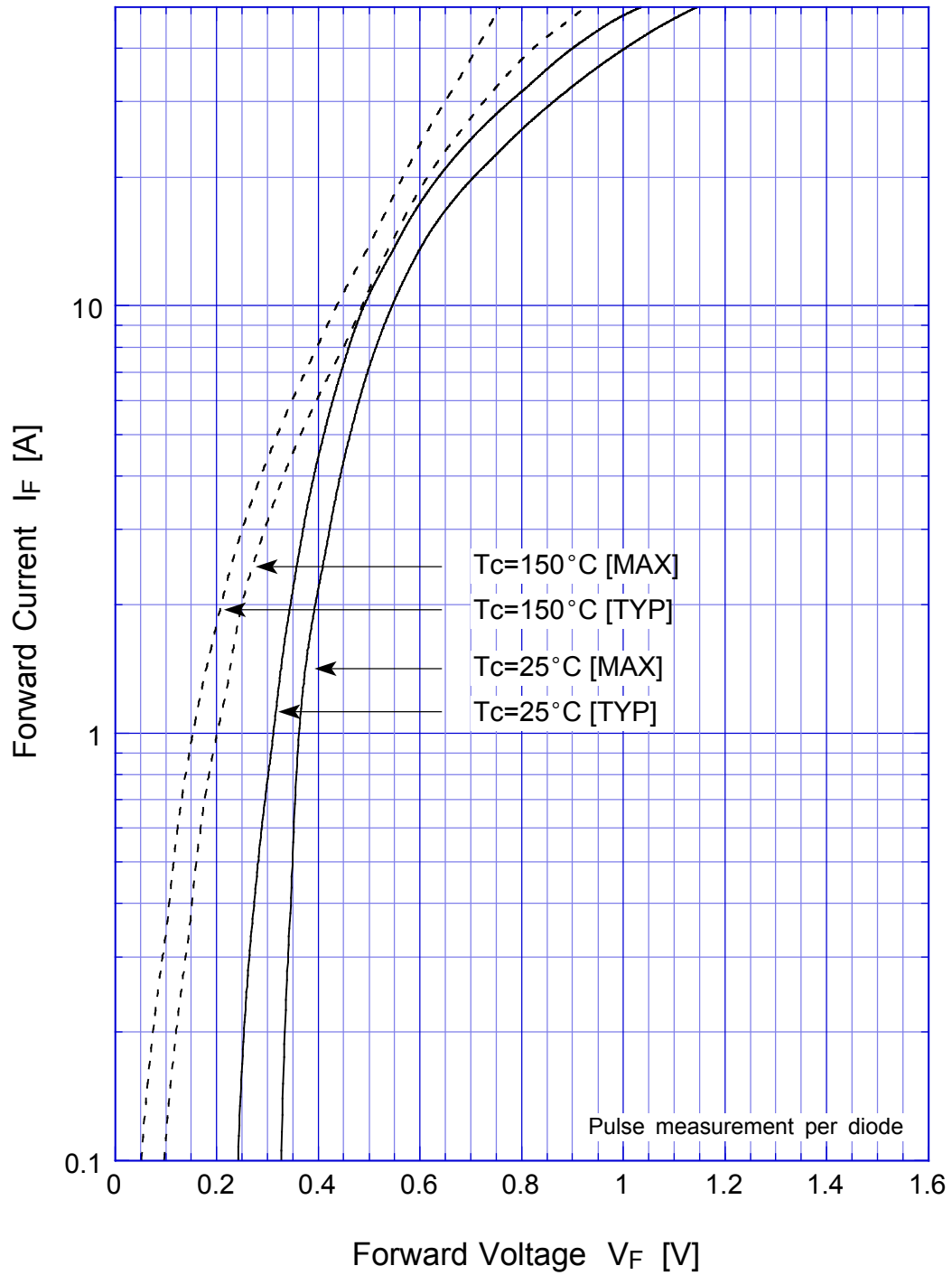
Absolute Maximum Ratings (If not specified  $T_c=25$  )

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40 ~ 150	
Operating Junction Temperature	$T_j$		150	
Maximum Reverse Voltage	$V_{RM}$		60	V
Repetitive Peak Surge Reverse Voltage	$V_{RRSM}$	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	$I_o$	50Hz sine wave, R-load, Rating for each diode $I_o/2$ , $T_c=128$	25	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=125$	300	A
Repetitive Peak Surge Reverse Power	$P_{RRSM}$	Pulse width 10 $\mu$ s, Rating of per diode, $T_j=25$	660	W
Mounting Torque	TOR	(Recommended torque :0.5N·m)	0.8	N·m

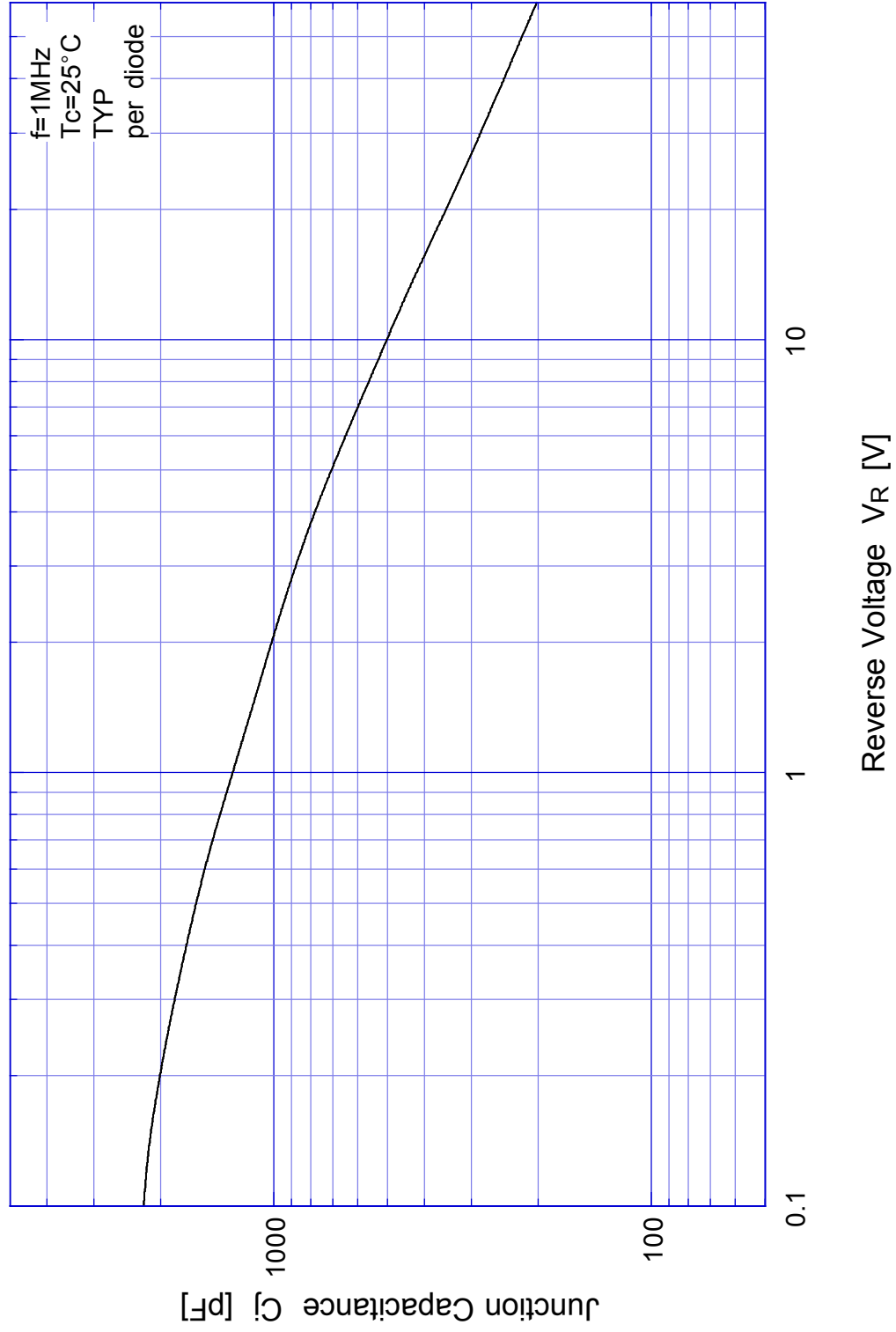
Electrical Characteristics (If not specified  $T_c=25$  )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=12.5A$ , Pulse measurement, Rating of per diode	Max.0.58	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.490	pF
Thermal Resistance	jc	junction to case	Max.1.0	/W

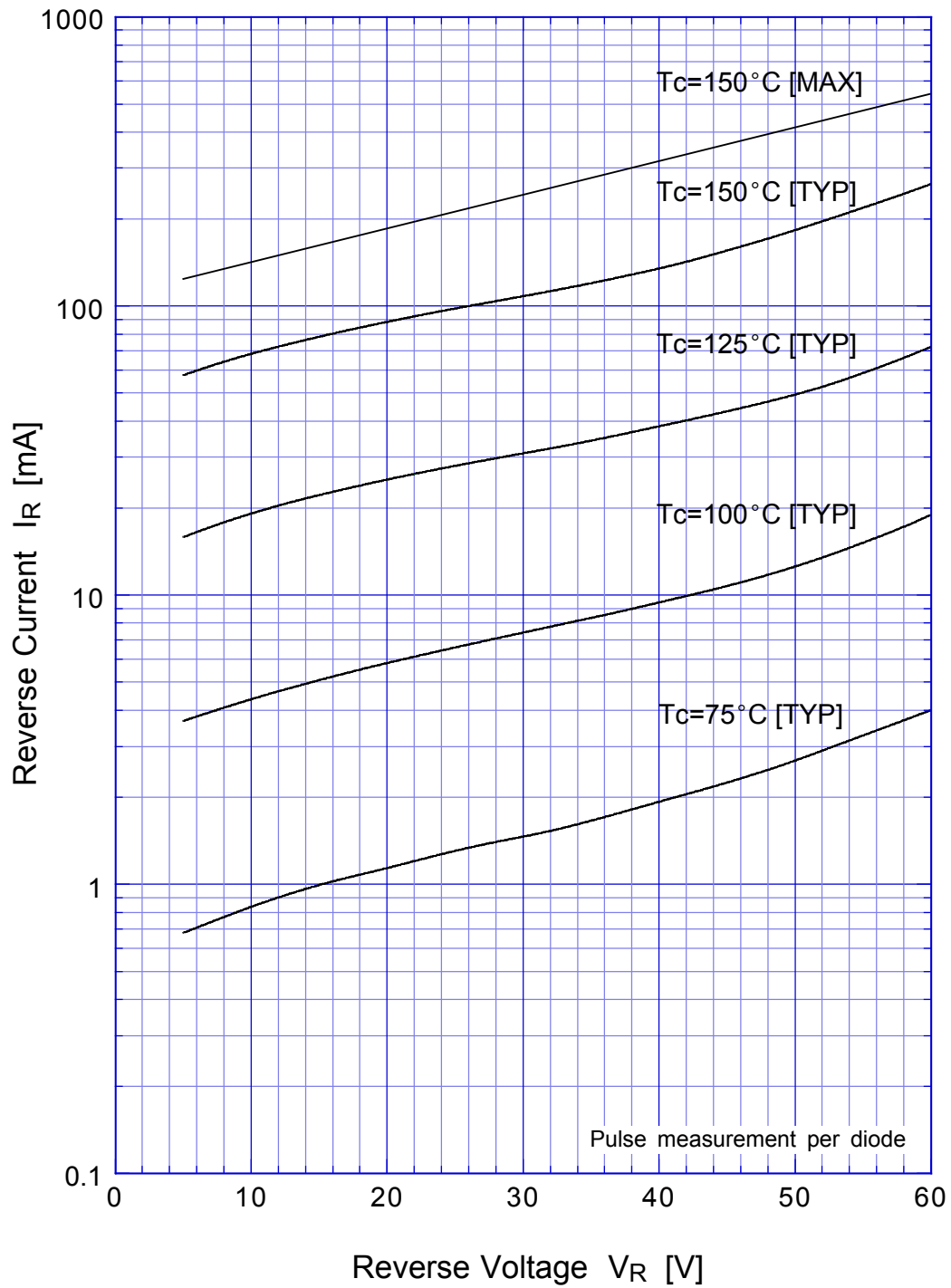
# S25SC6M Forward Voltage



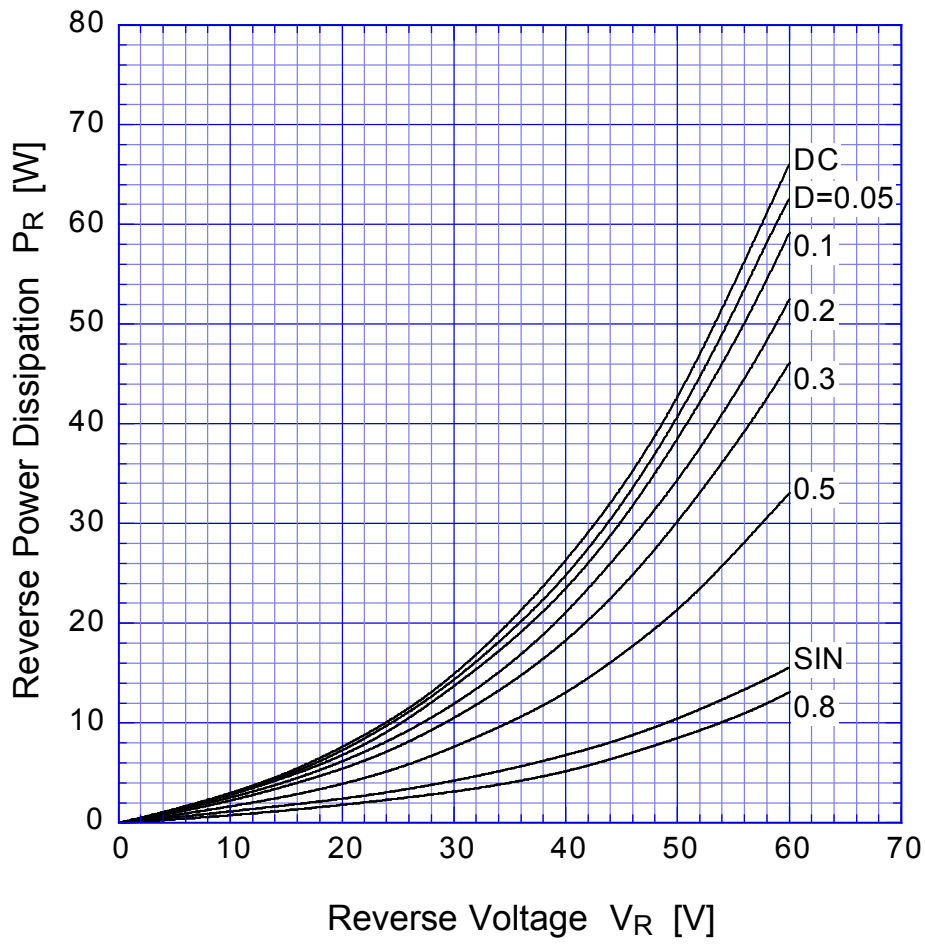
# S25SC6M Junction Capacitance



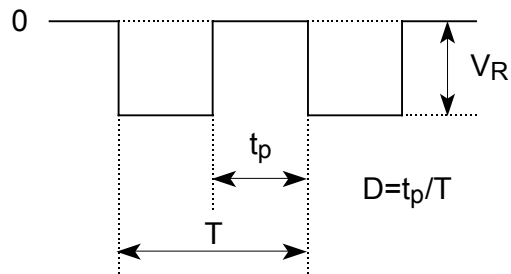
# S25SC6M Reverse Current



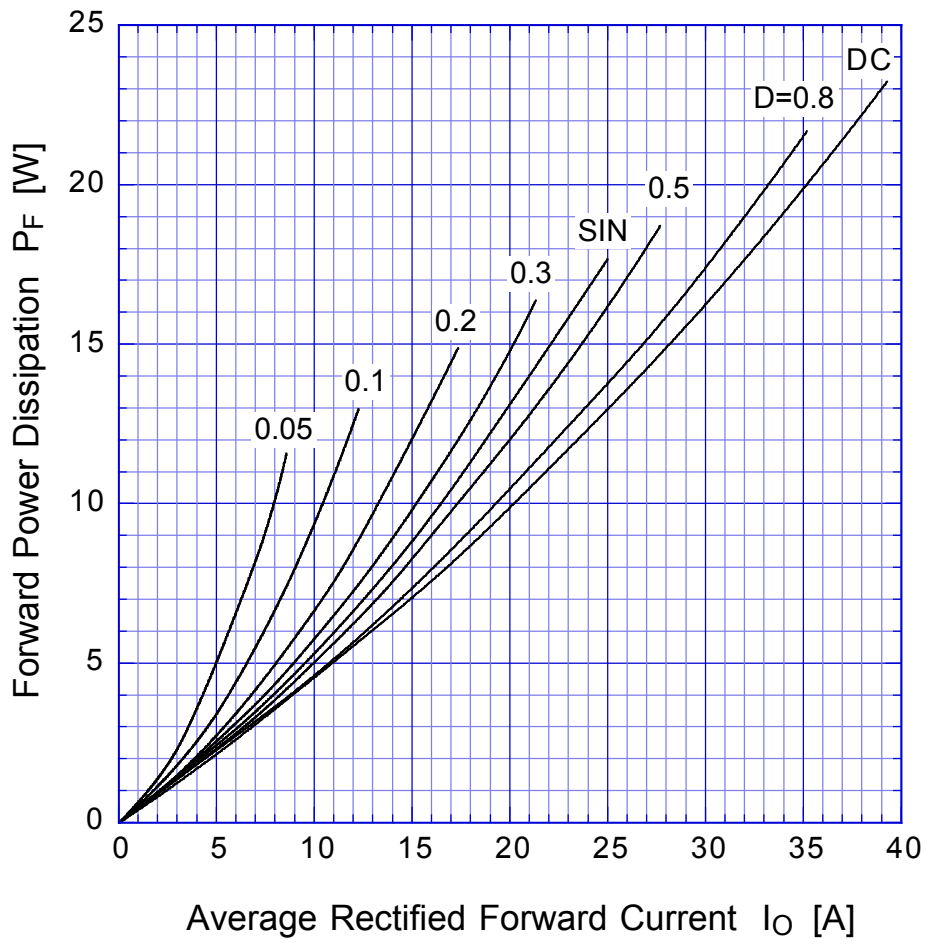
# S25SC6M Reverse Power Dissipation



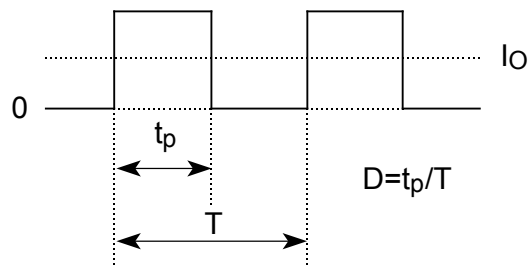
$T_j = 150^\circ\text{C}$



# S25SC6M Forward Power Dissipation

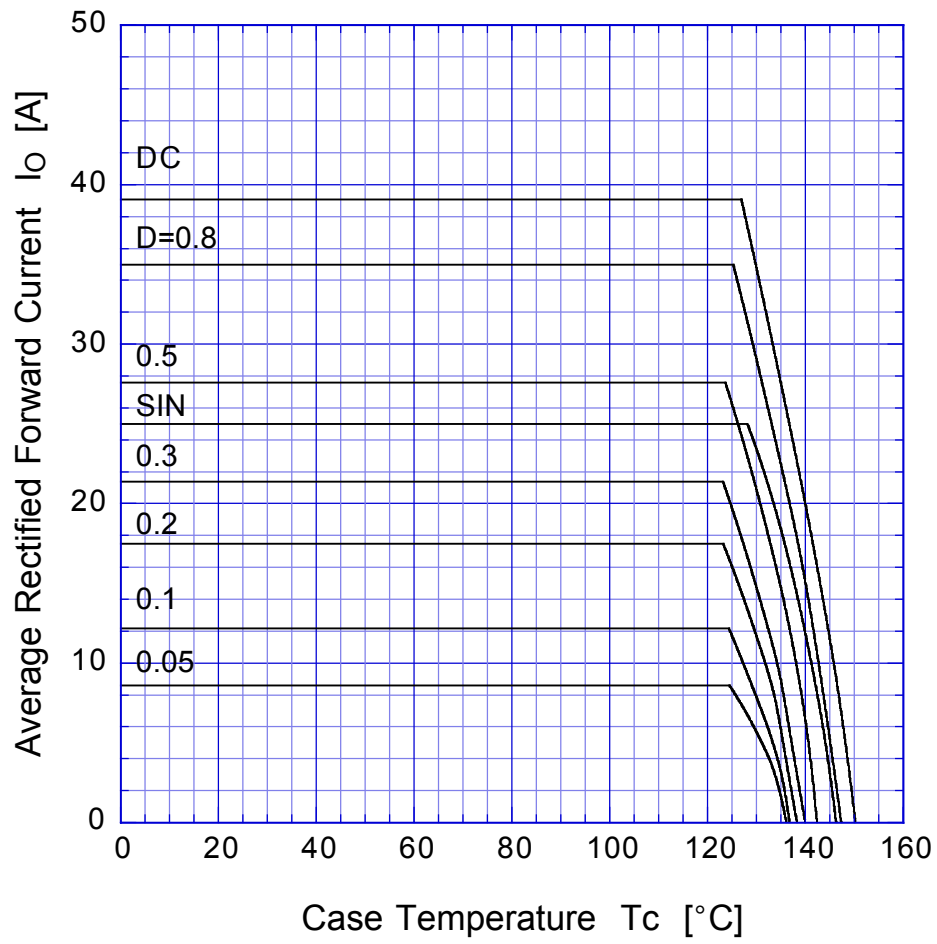


$T_j = 150^\circ\text{C}$

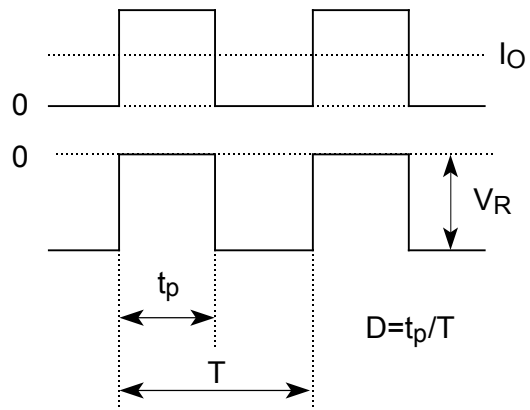


# S25SC6M

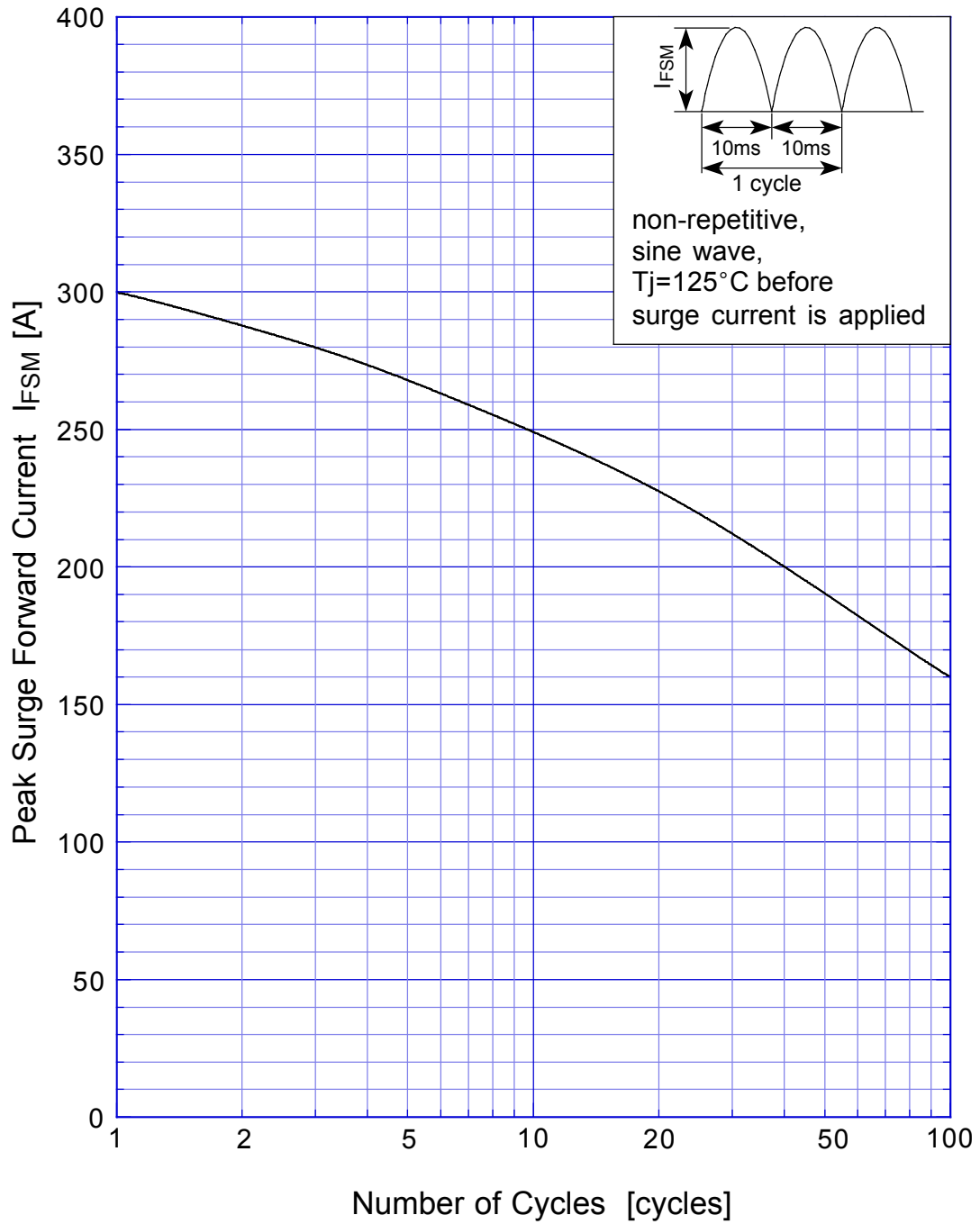
## Derating Curve



$V_R = 30V$

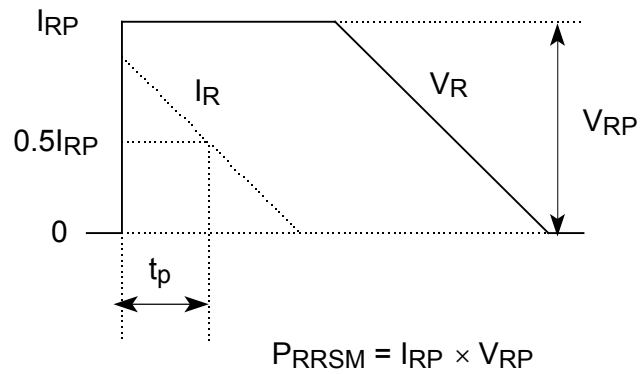
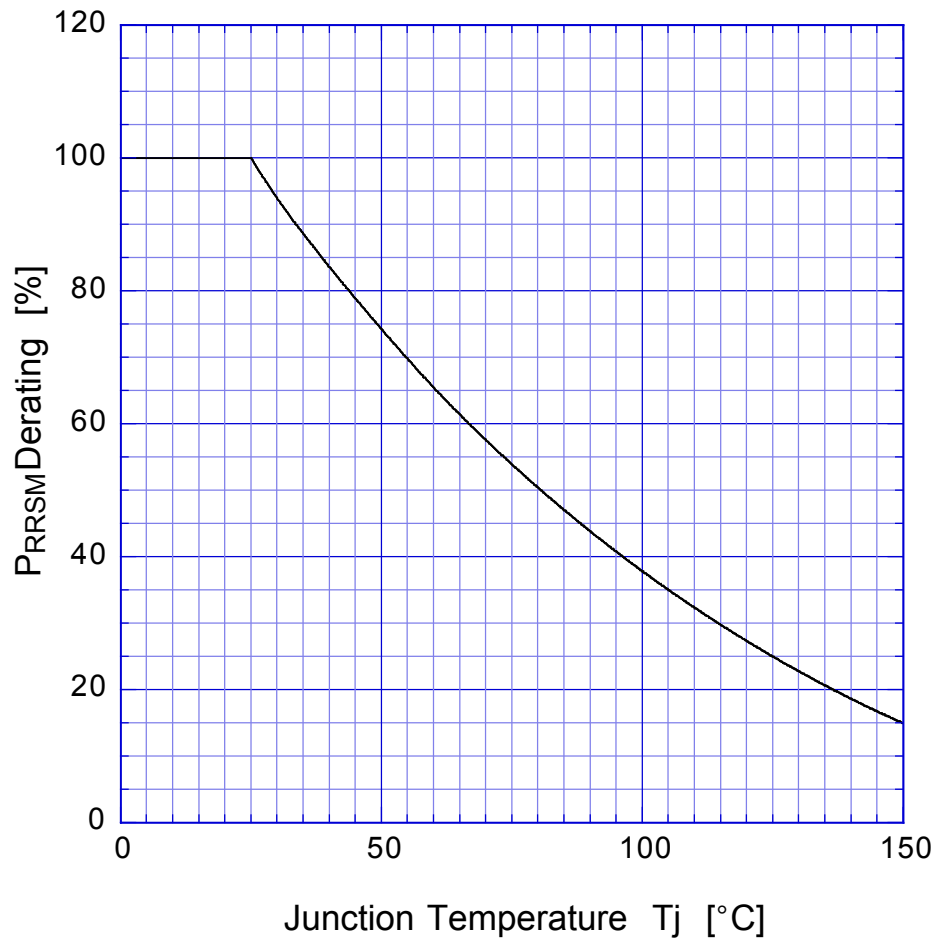


# S25SC6M Peak Surge Forward Capability





## SBD Repetitive Surge Reverse Power Derating Curve



# SBD

## Repetitive Surge Reverse Power Capability

