

# D25SC6MR

## 60V 25A

### FEATURES

Tj150  
 $P_{RRSM}$  avalanche guaranteed  
 High current capacity  
 Fully Isolated Molding

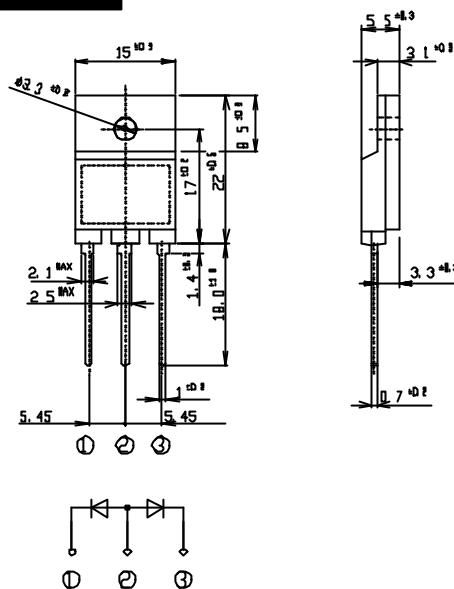
### APPLICATION

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

### OUTLINE DIMENSIONS

Case : ITO-3P

Unit : mm



### RATINGS

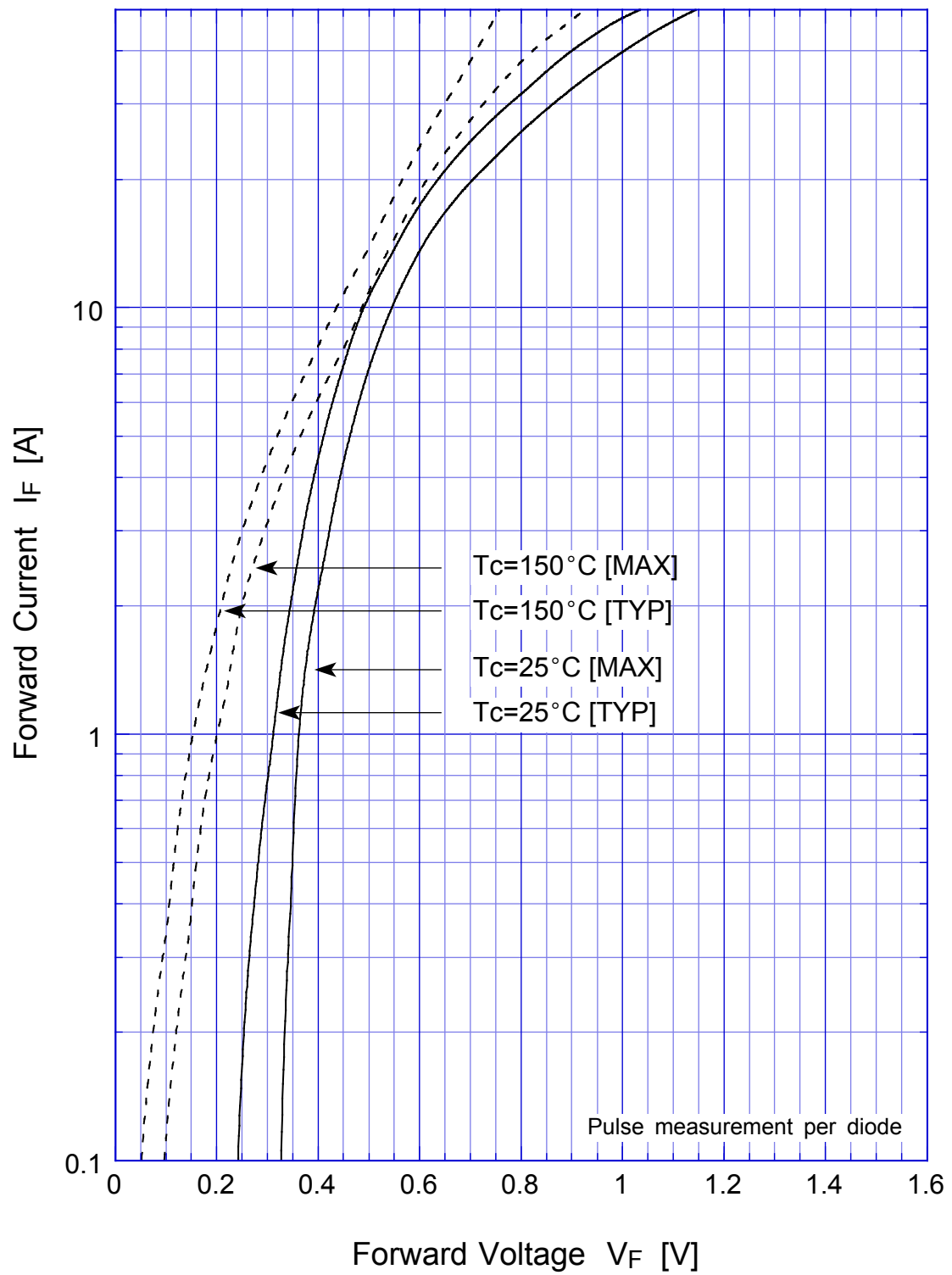
Absolute Maximum Ratings (If not specified  $T_c=25^\circ\text{C}$  )

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 $I_o/2$ , $T_c=117$	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
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	1.5	kV
Mounting Torque	TOR	(Recommended torque 0.5N·m)	0.8	N·m

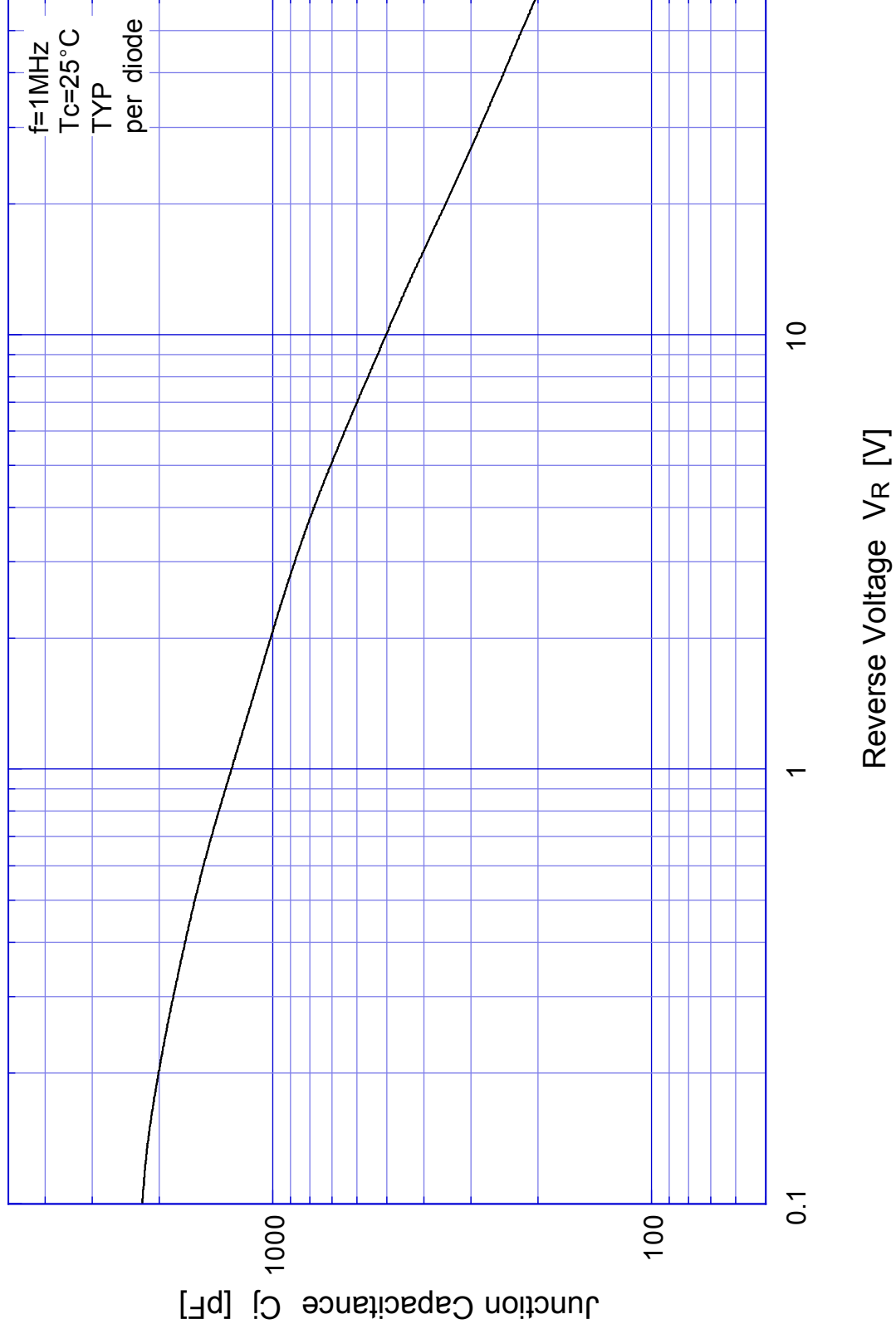
Electrical Characteristics (If not specified  $T_c=25^\circ\text{C}$  )

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	$\theta_{jc}$	junction to case	Max.1.5	/W

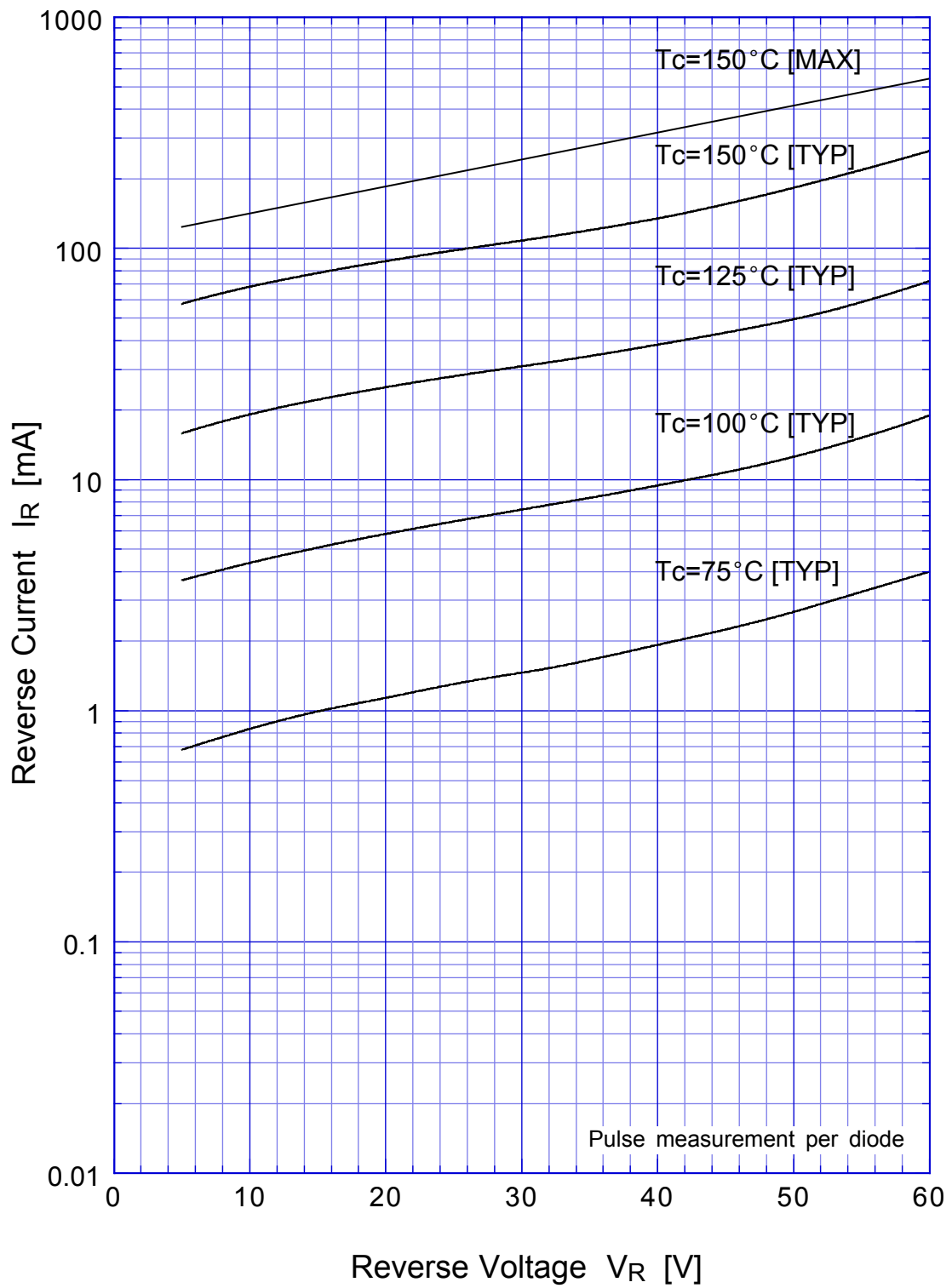
## D25SC6MR Forward Voltage



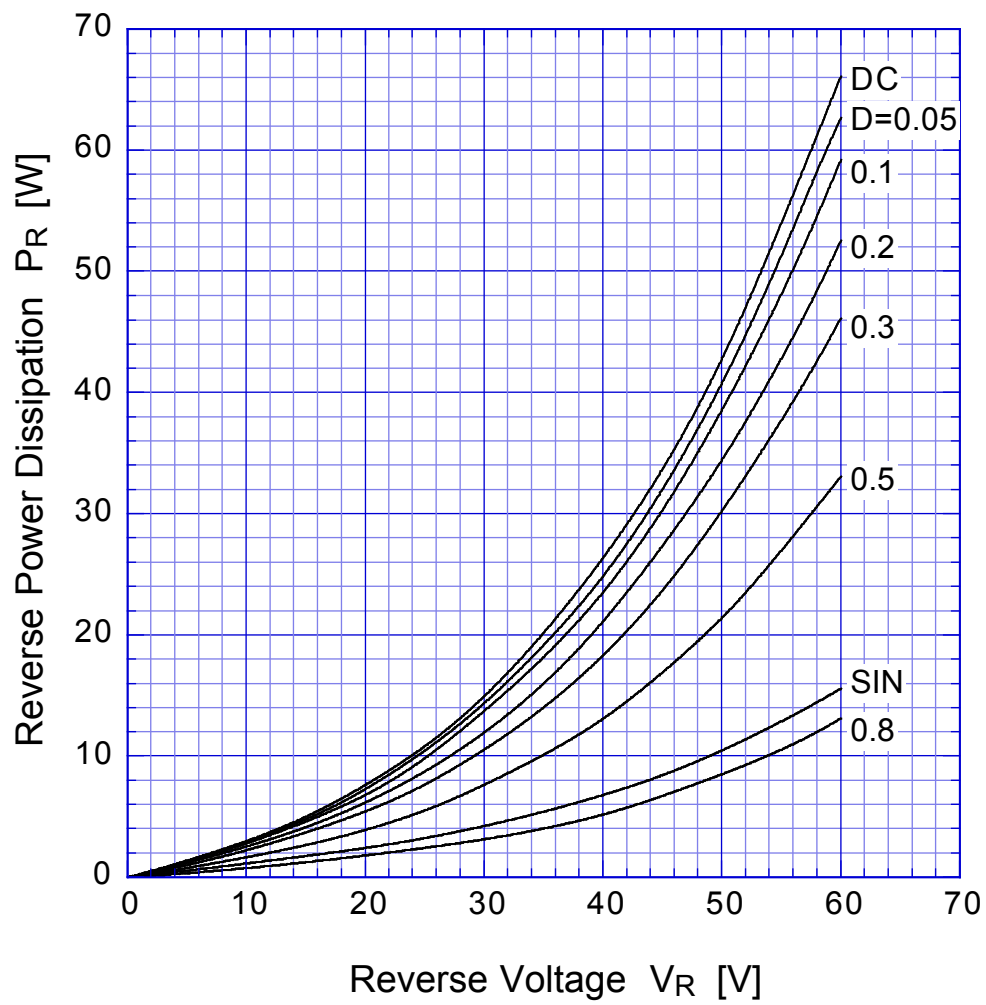
# D25SC6MR      Junction Capacitance



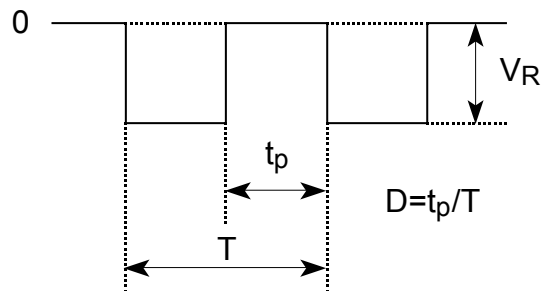
## D25SC6MR Reverse Current



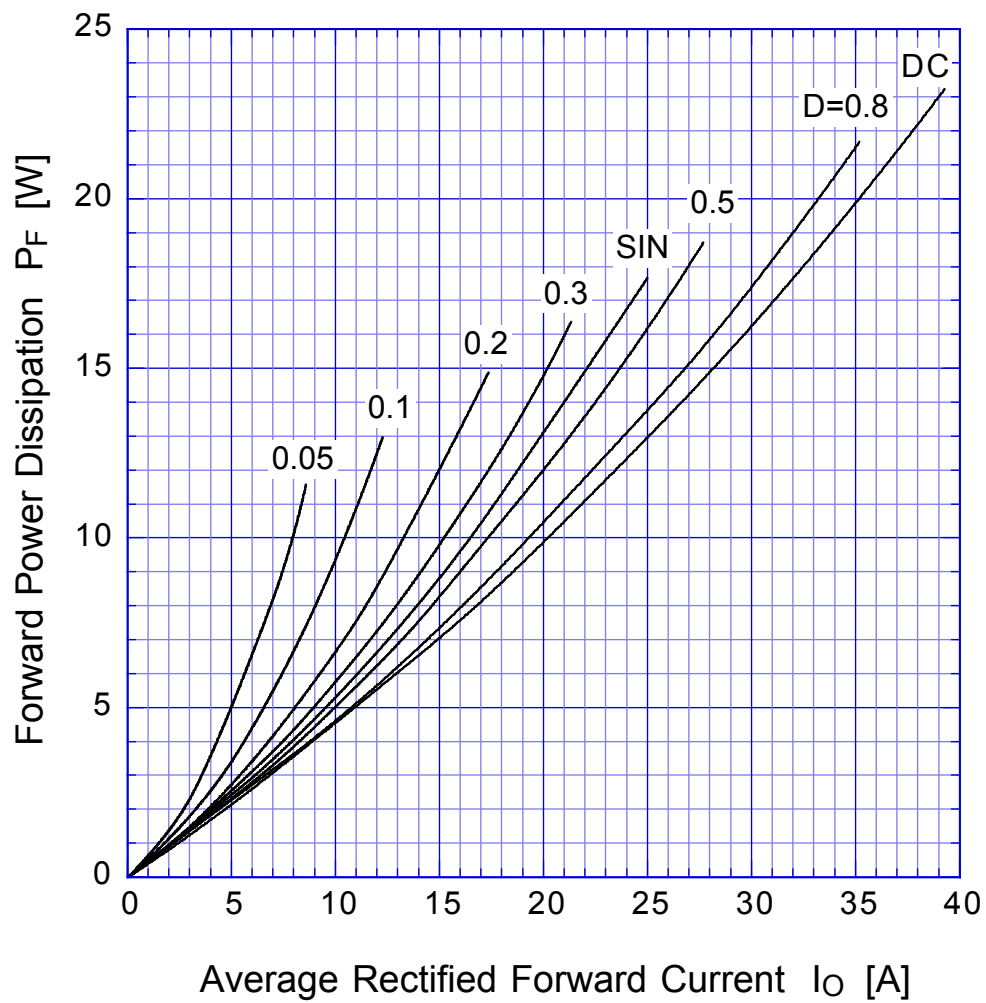
## D25SC6MR Reverse Power Dissipation



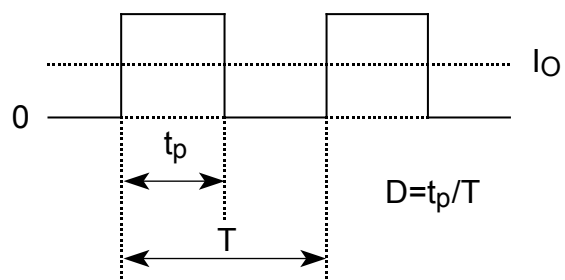
$T_j = 150^\circ\text{C}$



## D25SC6MR Forward Power Dissipation

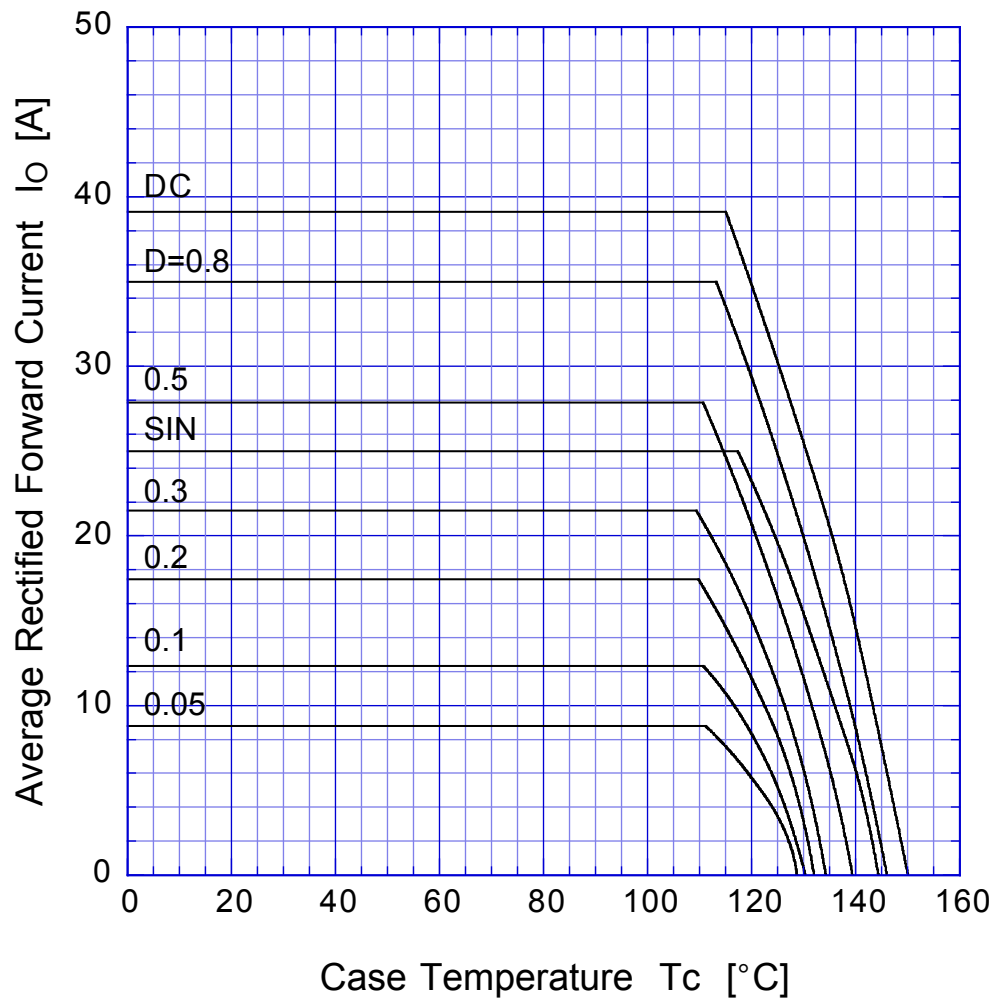


$T_j = 150^\circ\text{C}$

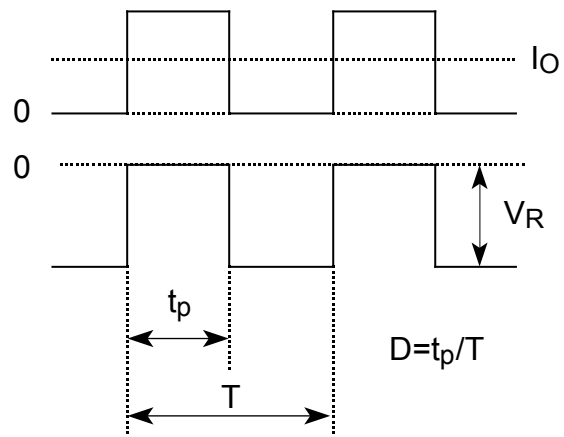


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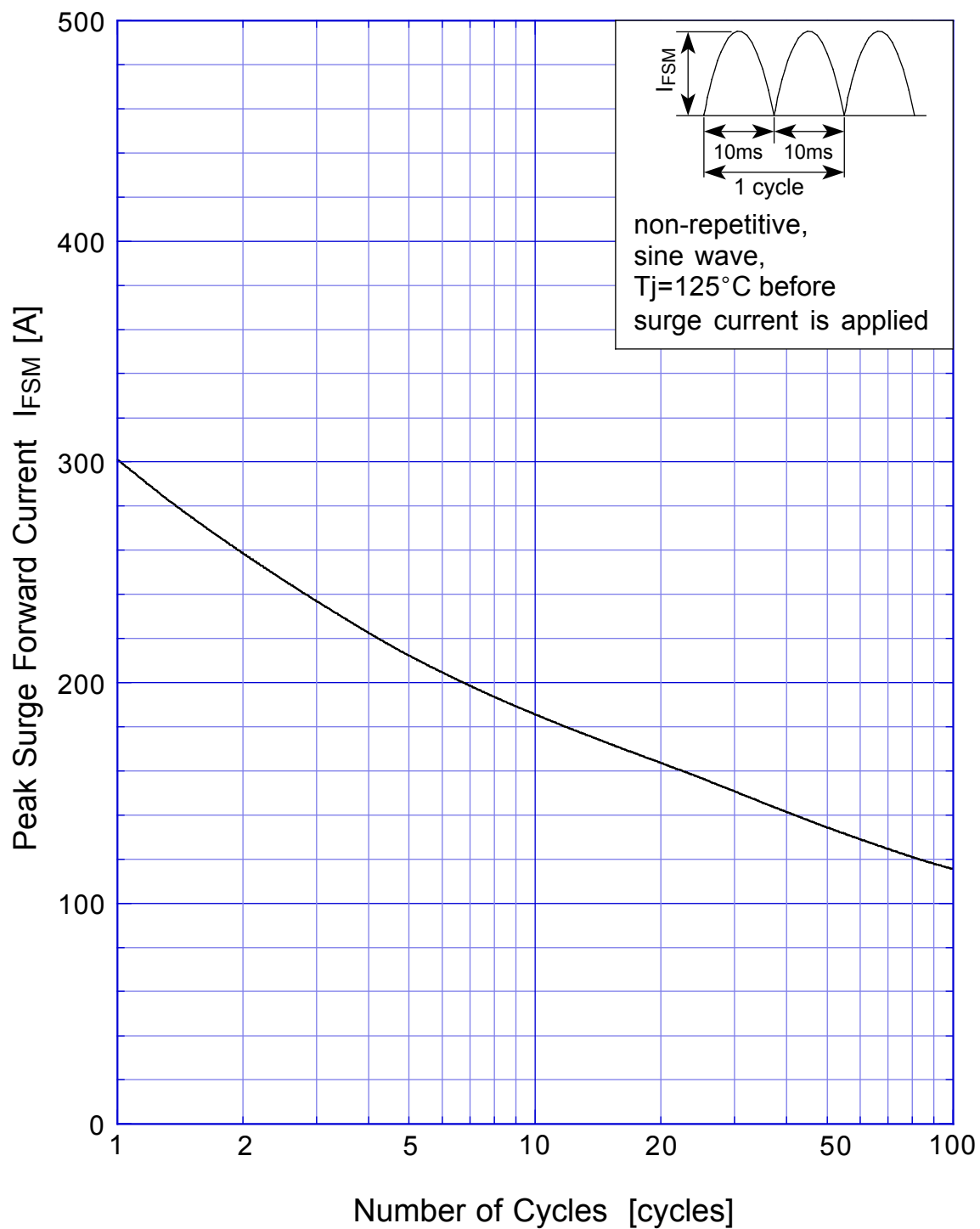
## Derating Curve



$V_R = 30V$



## D25SC6MR Peak Surge Forward Capability



## SBD Repetitive Surge Reverse Power Derating Curve

