SHINDENGEN

Schottky Rectifiers (SBD)

Dual

D25SC6MR

60V 25A

FEATURES

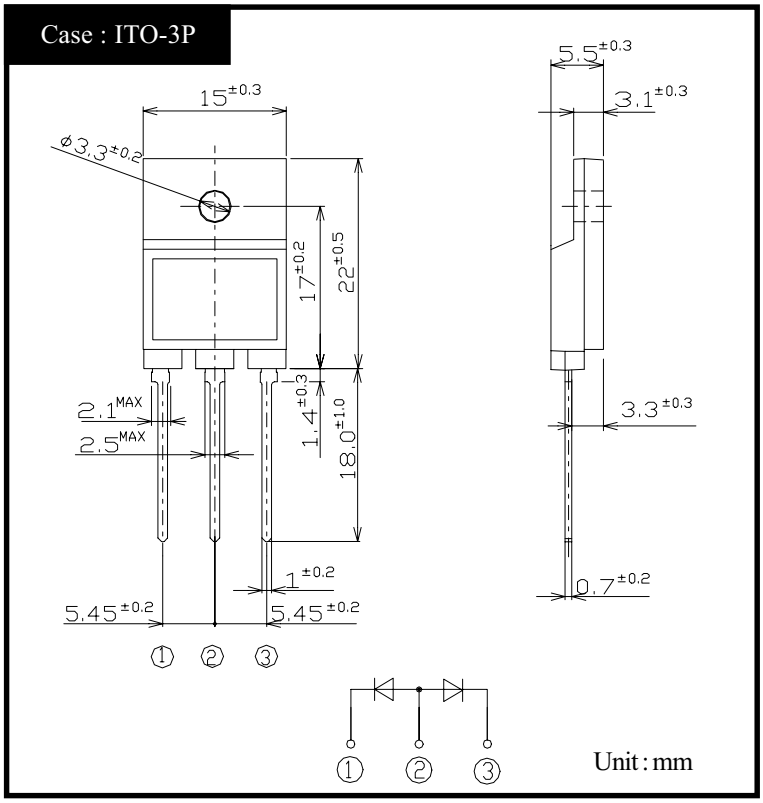
- Tj150℃
- P_{RRSM} avalanche guaranteed
- High current capacity
- Fully Isolated Molding

APPLICATION

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

OUTLINE DIMENSIONS

Case : ITO-3P



RATINGS

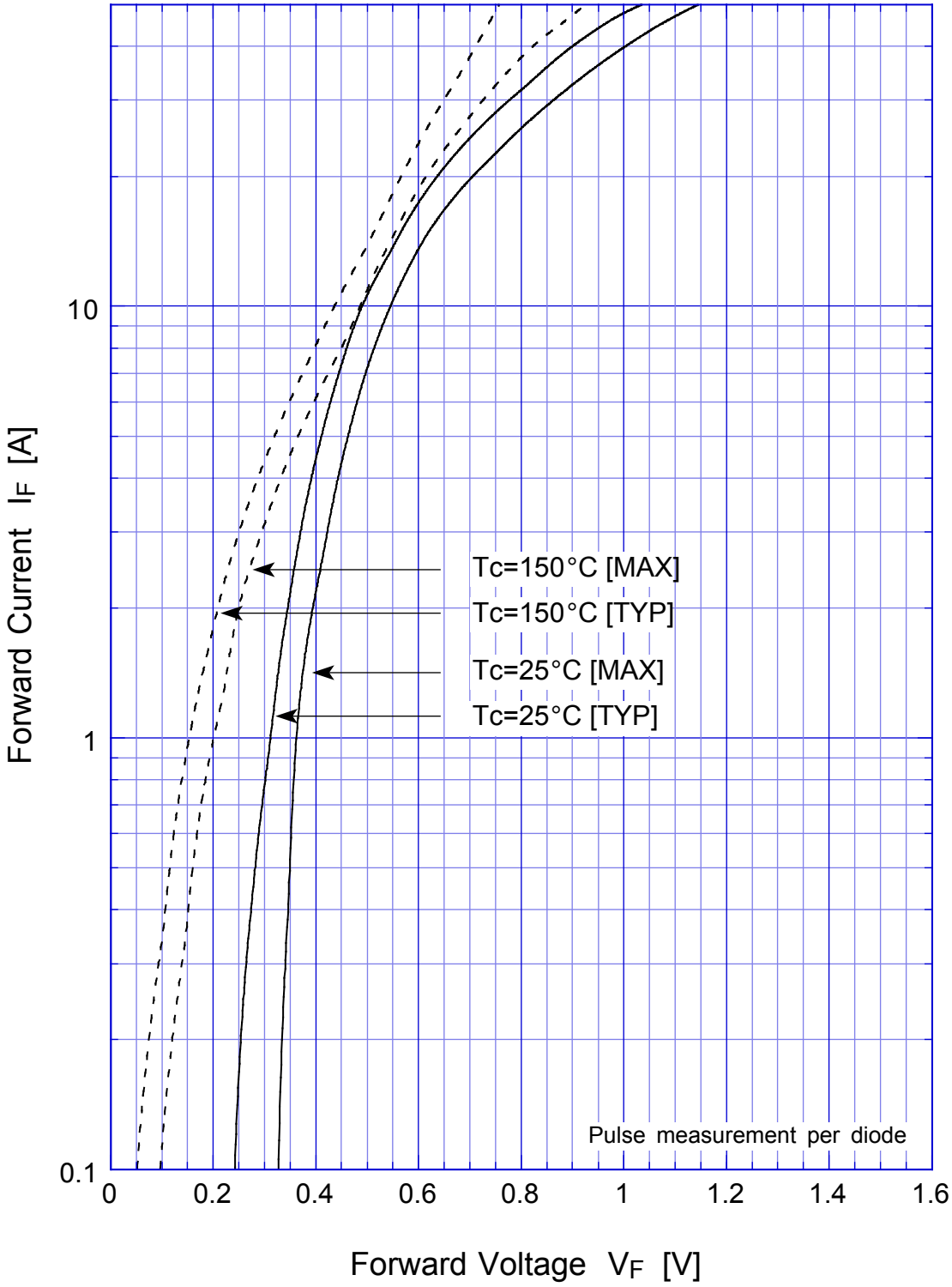
●Absolute Maximum Ratings (If not specified Tc=25℃)

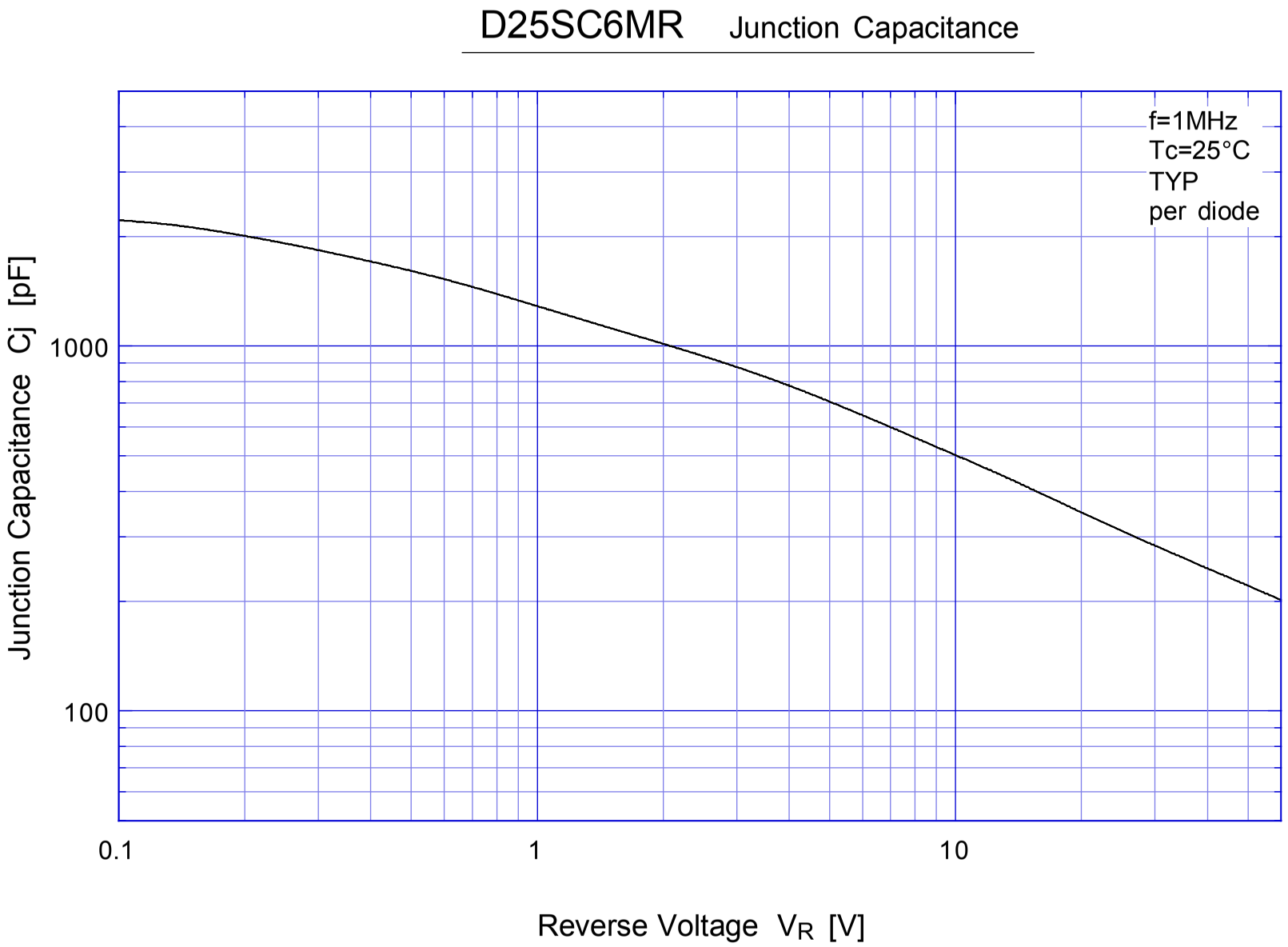
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		−40～150	℃
Operating Junction Temperature	Tj		150	℃
Maximum Reverse Voltage	V_{RM}		60	V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, Rating for each diode Io/2, Tc=117℃	25	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125℃	300	A
Repetitive Peak Surge Reverse Power	P_{RRSM}	Pulse width 10μs, Rating of per diode, Tj=25℃	660	W
Dielectric Strength	Vdis	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 Tc=25℃)

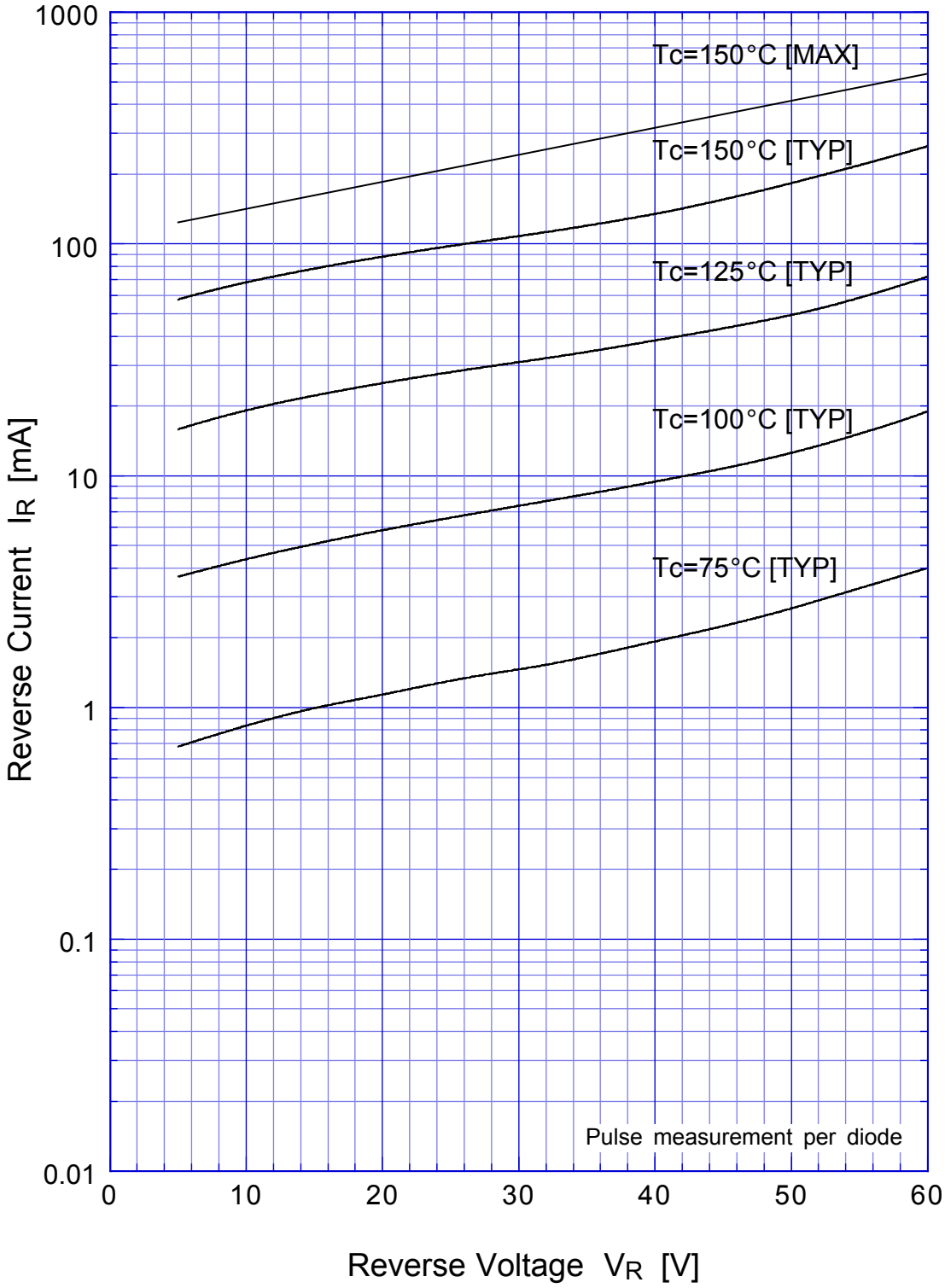
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	I_F=12.5A, Pulse measurement, Rating of per diode	Max.0.58	V
Reverse Current	I_R	V_R=V_{RM}, Pulse measurement, Rating of per diode	Max.10	mA
Junction Capacitance	Cj	f=1MHz, V_R=10V, Rating of per diode	Typ.490	pF
Thermal Resistance	θ jc	junction to case	Max.1.5	℃/W

D25SC6MR Forward Voltage

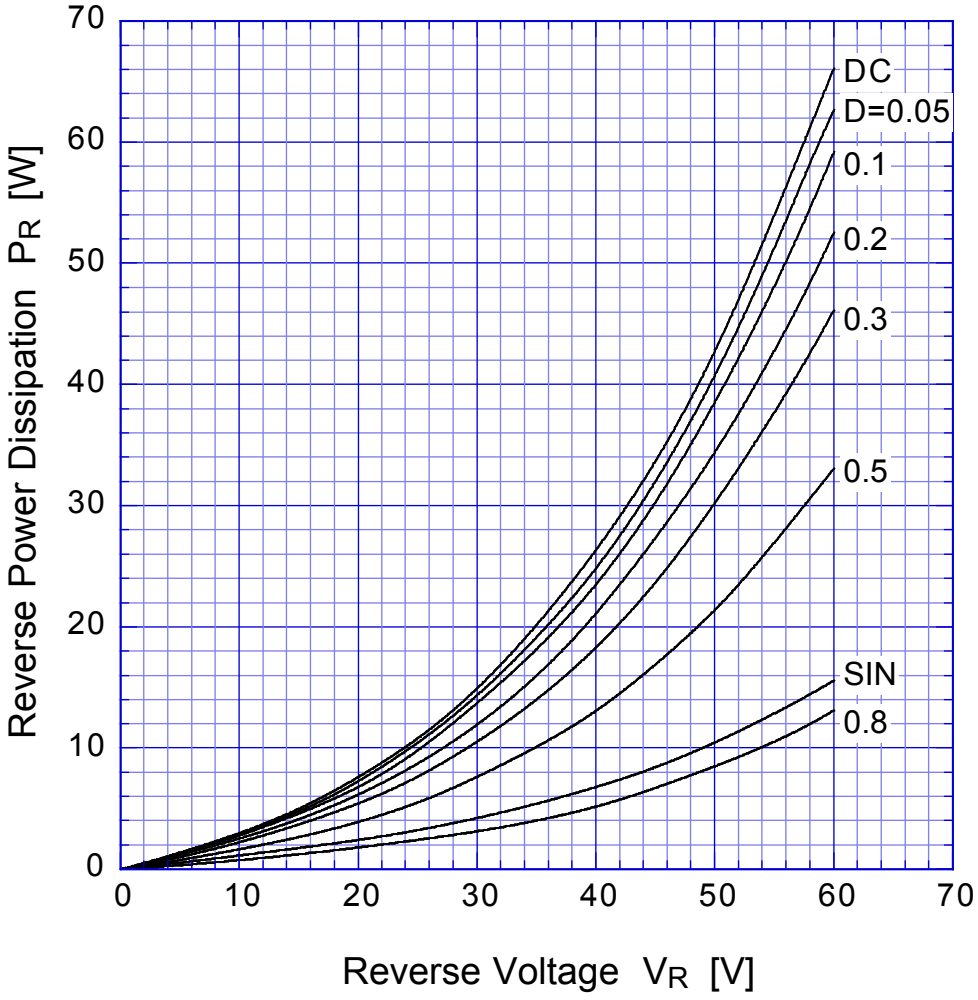



D25SC6MR Junction Capacitance
f=1MHz
Tc=25°C
TYP
per diode
Junction Capacitance Cj [pF]
1000
100
0.1
1
10
Reverse Voltage VR [V]

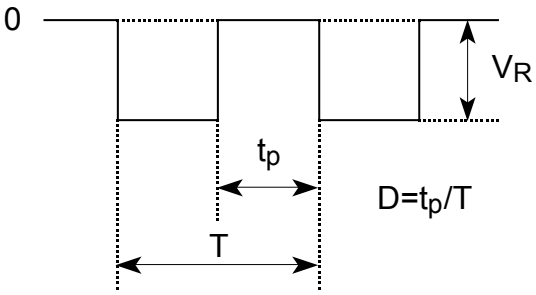
D25SC6MR Reverse Current



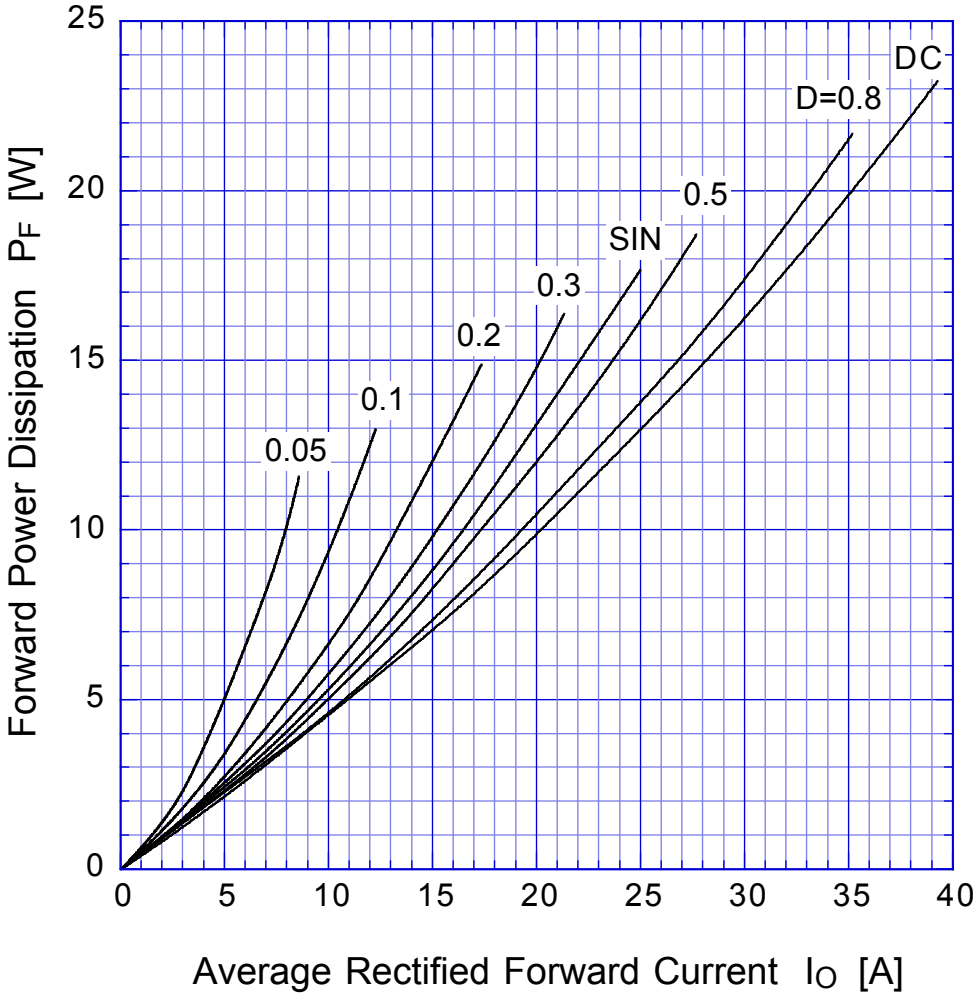
D25SC6MR Reverse Power Dissipation



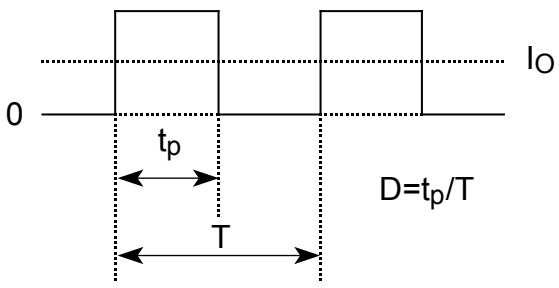
Tj = 150°C



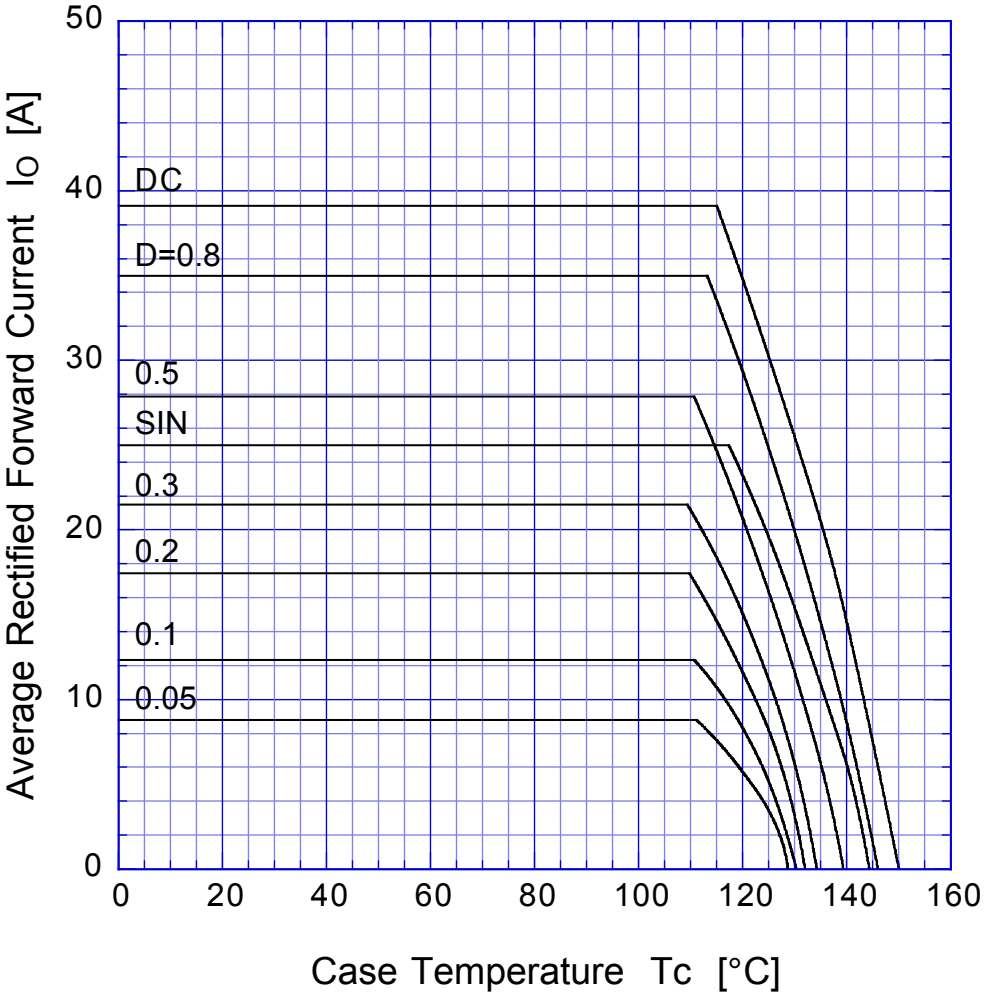
D25SC6MR Forward Power Dissipation



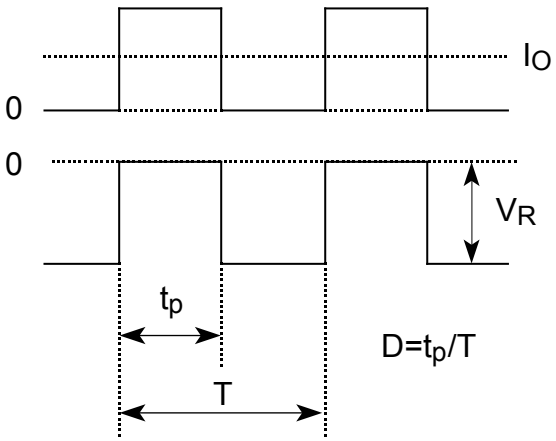
Tj = 150°C



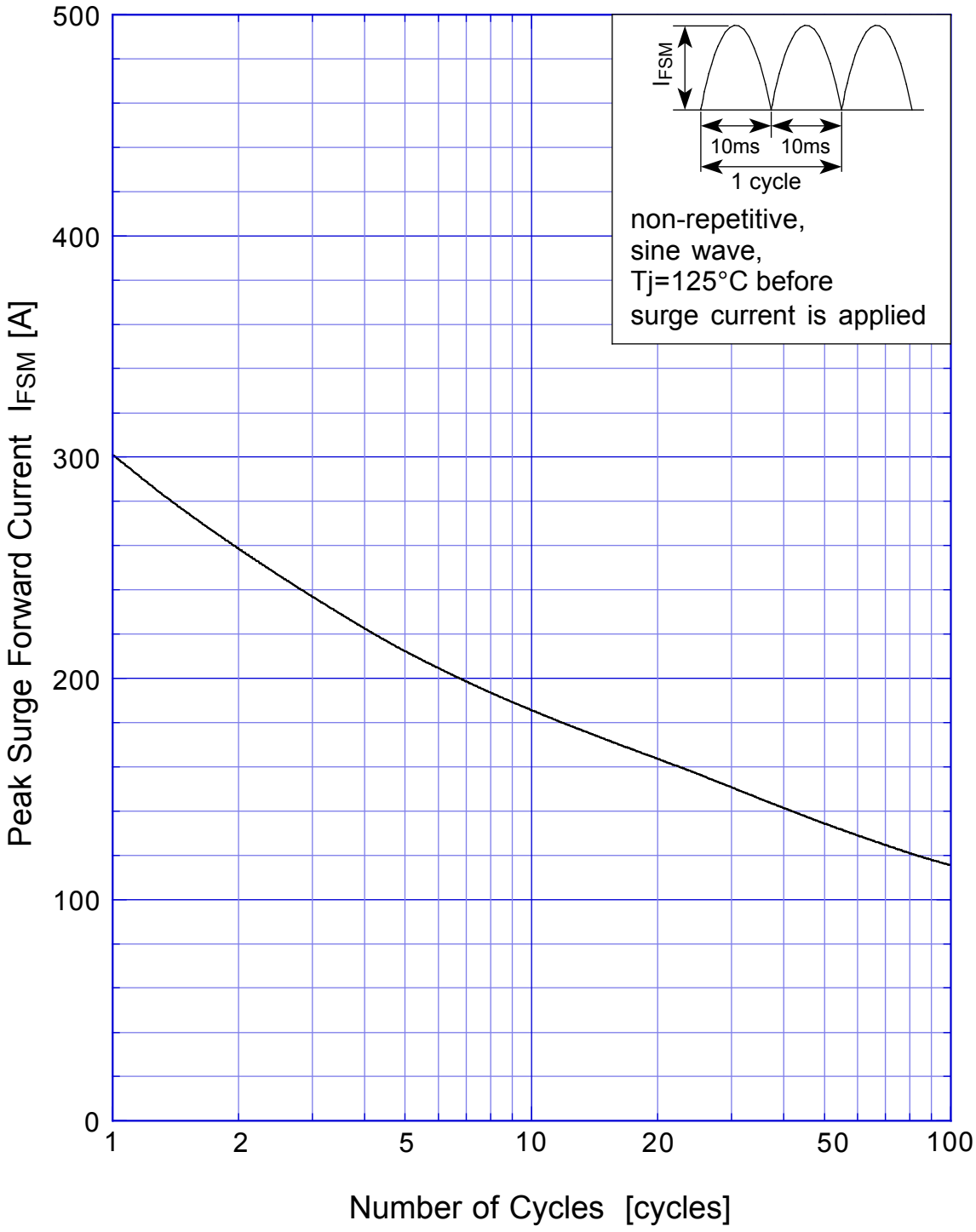
D25SC6MR Derating Curve



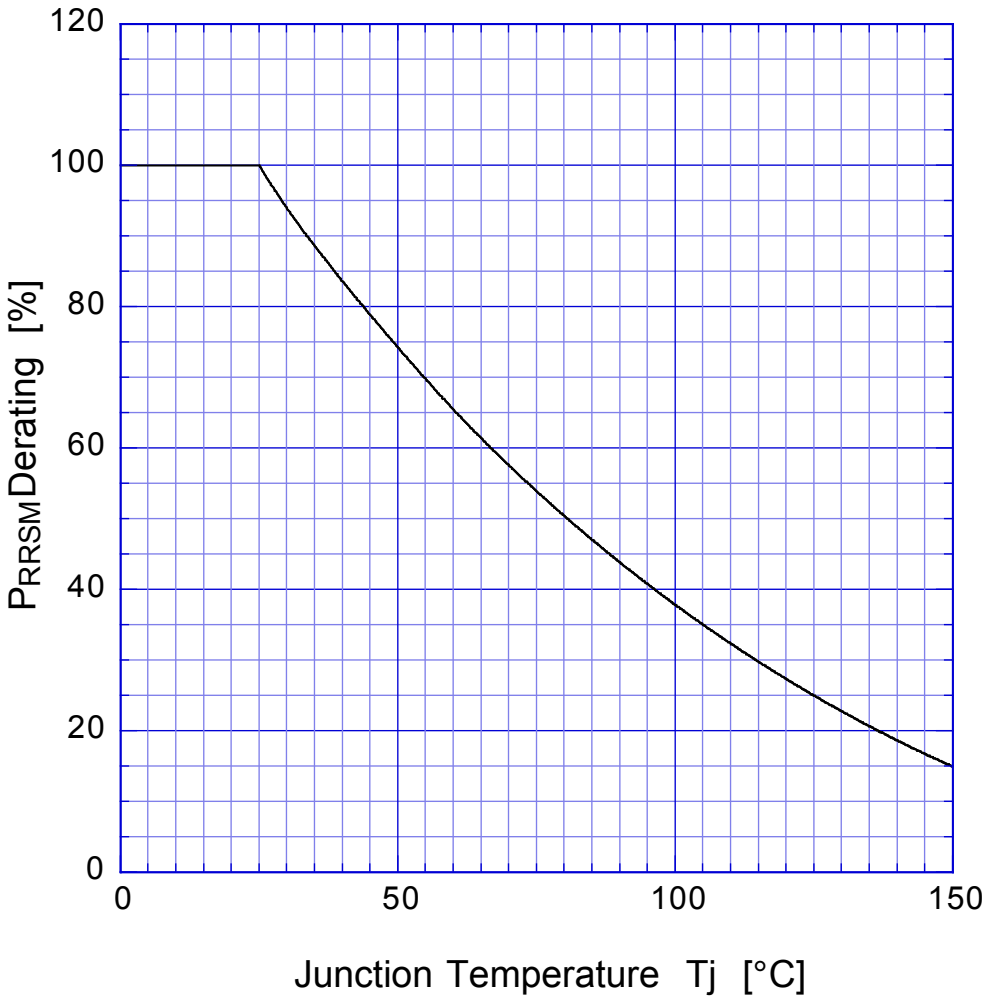
V_R = 30V

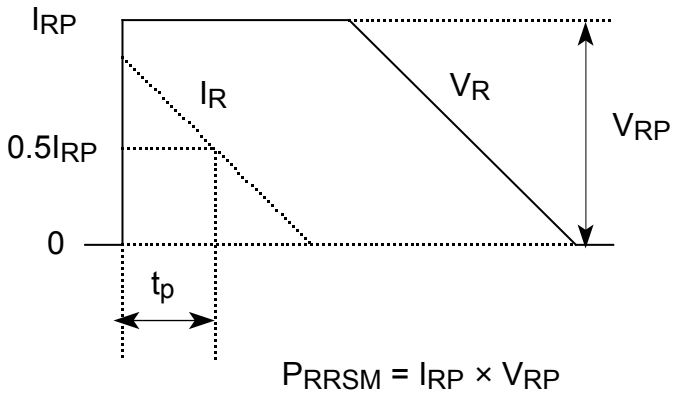


D25SC6MR Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve





SBD Repetitive Surge Reverse Power Capability