

D10SC4MR

40V 10A

FEATURES

- Tj150°C
- P_{RRSM} avalanche guaranteed
- Fully Isolated Molding

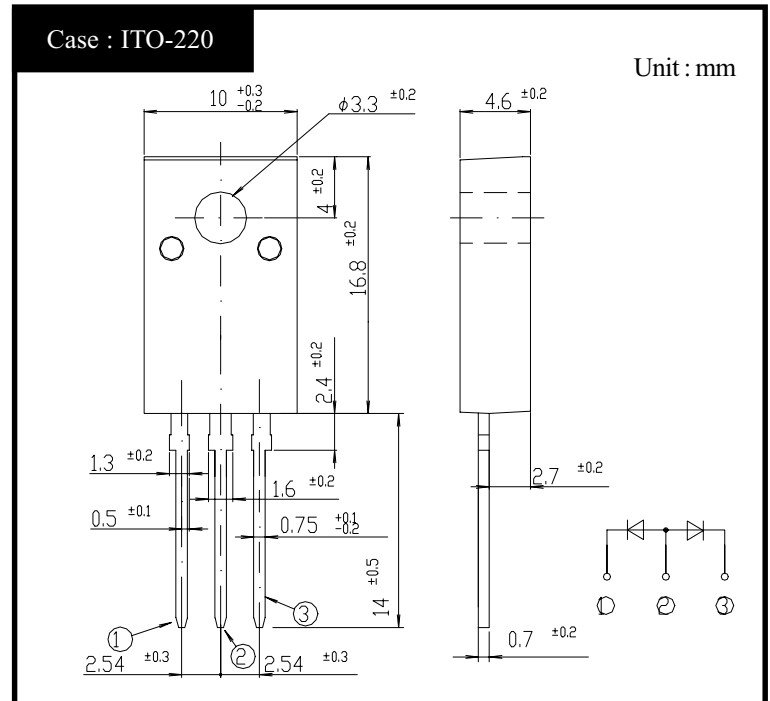
APPLICATION

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

OUTLINE DIMENSIONS

Case : ITO-220

Unit : mm



RATINGS

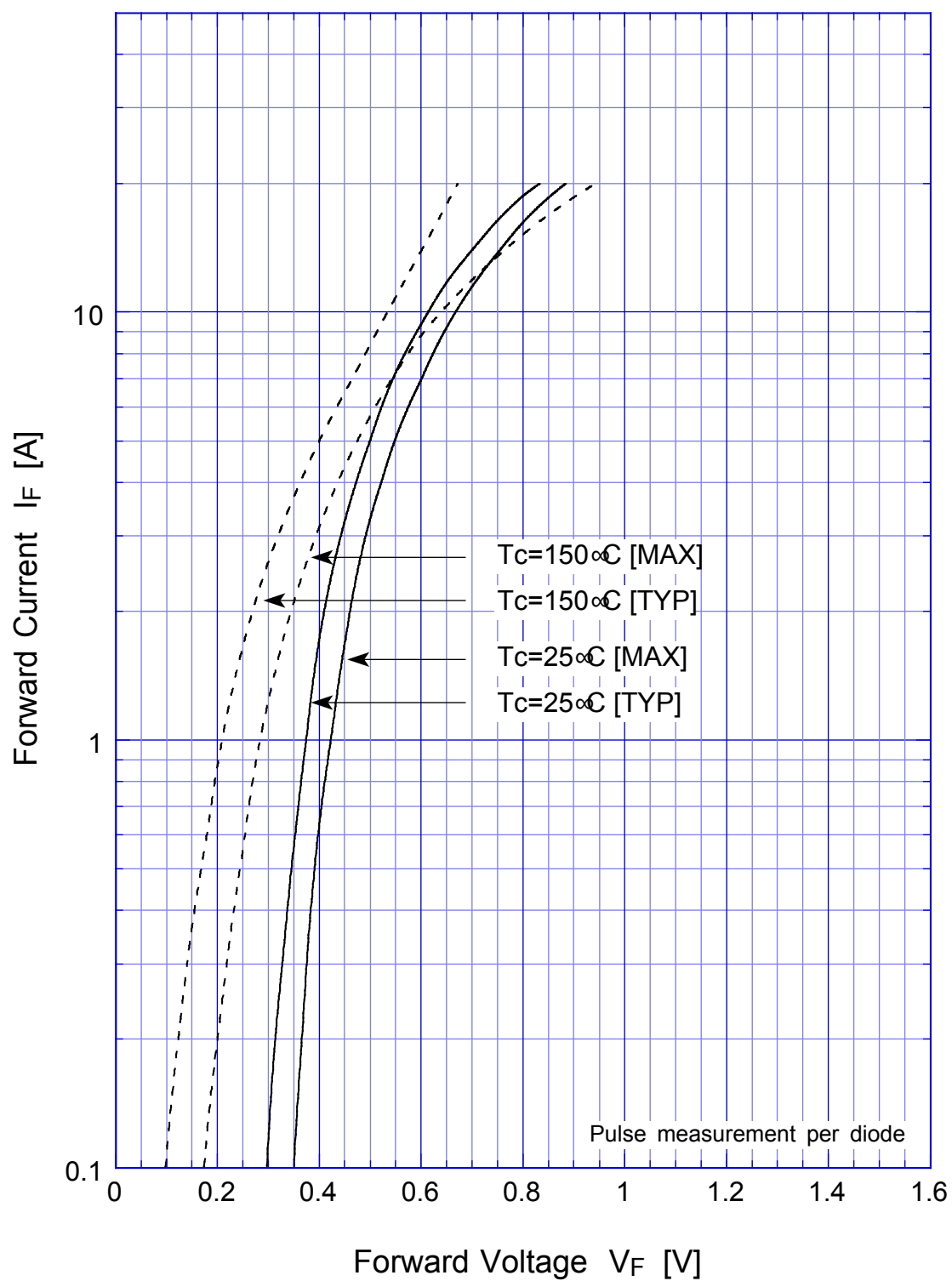
- Absolute Maximum Ratings (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V _{RM}		40	V
Repetitive Peak Surge Reverse Voltage	V _{RRSM}	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, Rating for each diode I _O /2, T _C =123°C	10	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, T _J =125°C	100	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μs, Rating of per diode, T _J = 25°C	330	W
Dielectric Strength	V _{dis}	Terminals to case, AC 1 minute	1.5	kV
Mounting Torque	TOR	(Recommended torque: 0.3N·m)	0.5	N·m

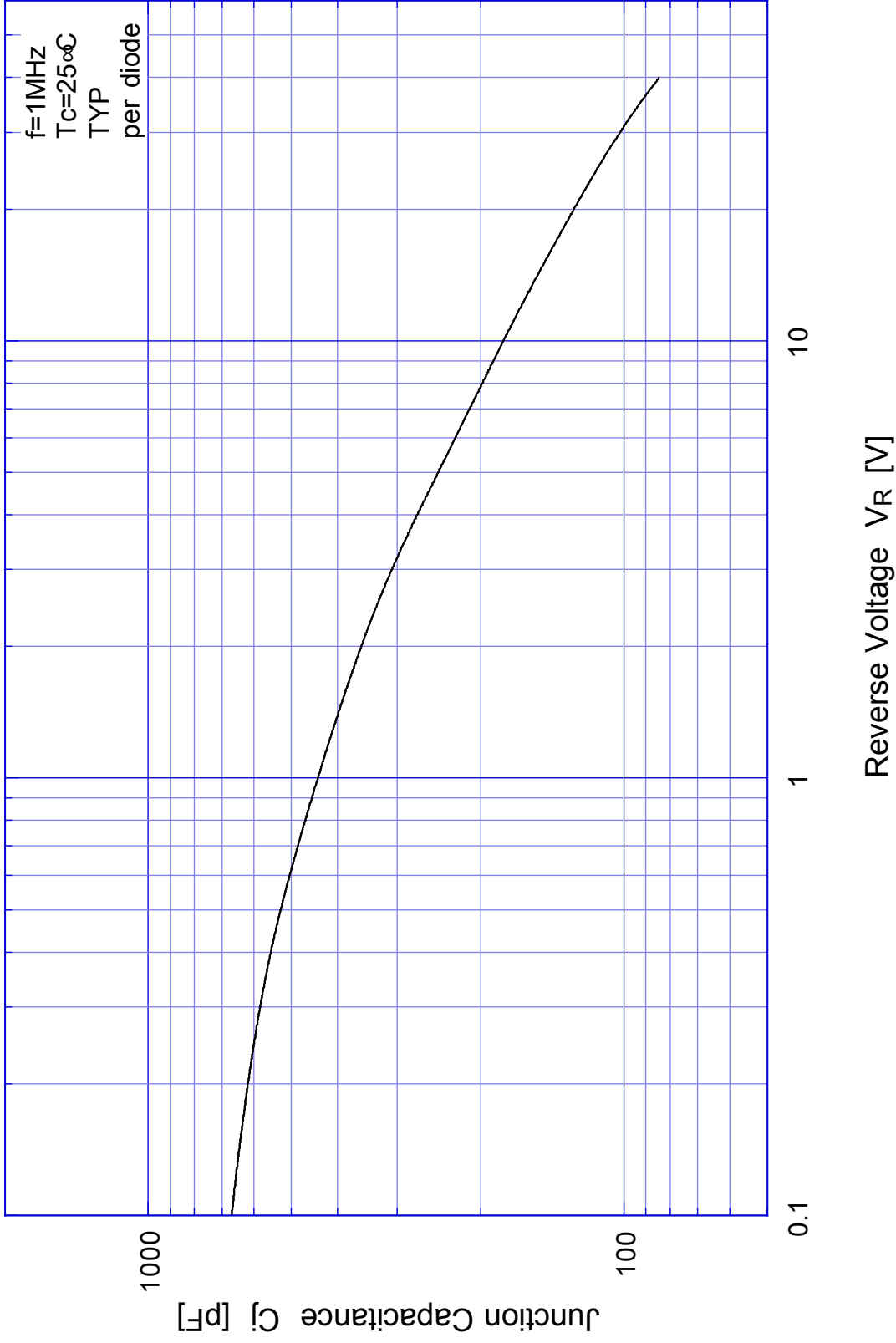
- Electrical Characteristics (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=5A$, Pulse measurement, Rating of per diode	Max 0.55	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max 3.5	mA
Junction Capacitance	C_j	$f=1MHz$, $V_R=10V$, Rating of per diode	Typ 180	pF
Thermal Resistance	θ_{jc}	junction to case	Max 3.3	°C/W
	θ_{jf}	junction to heatsink (Reference value)	Max 4.8	

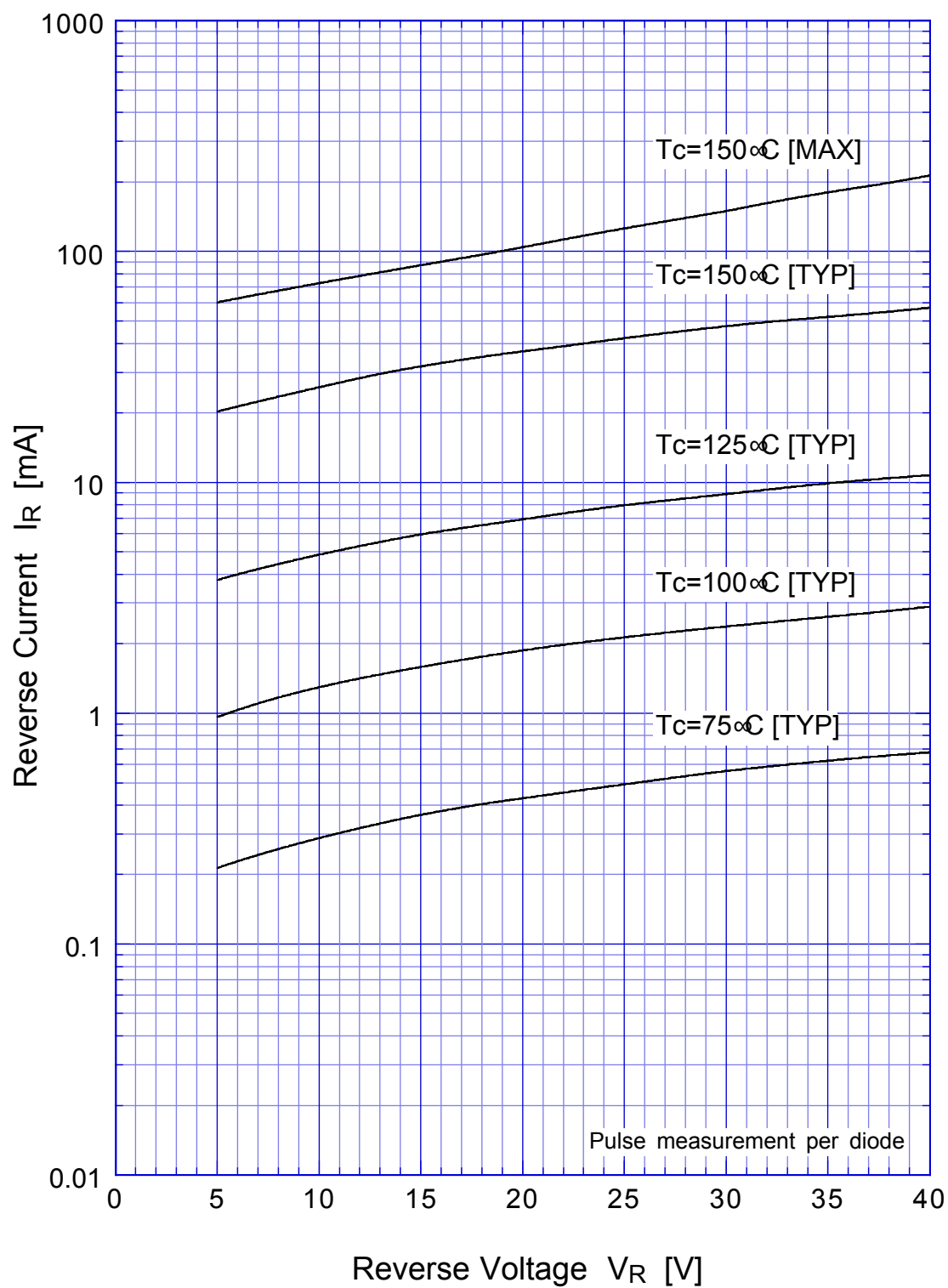
D10SC4MR Forward Voltage



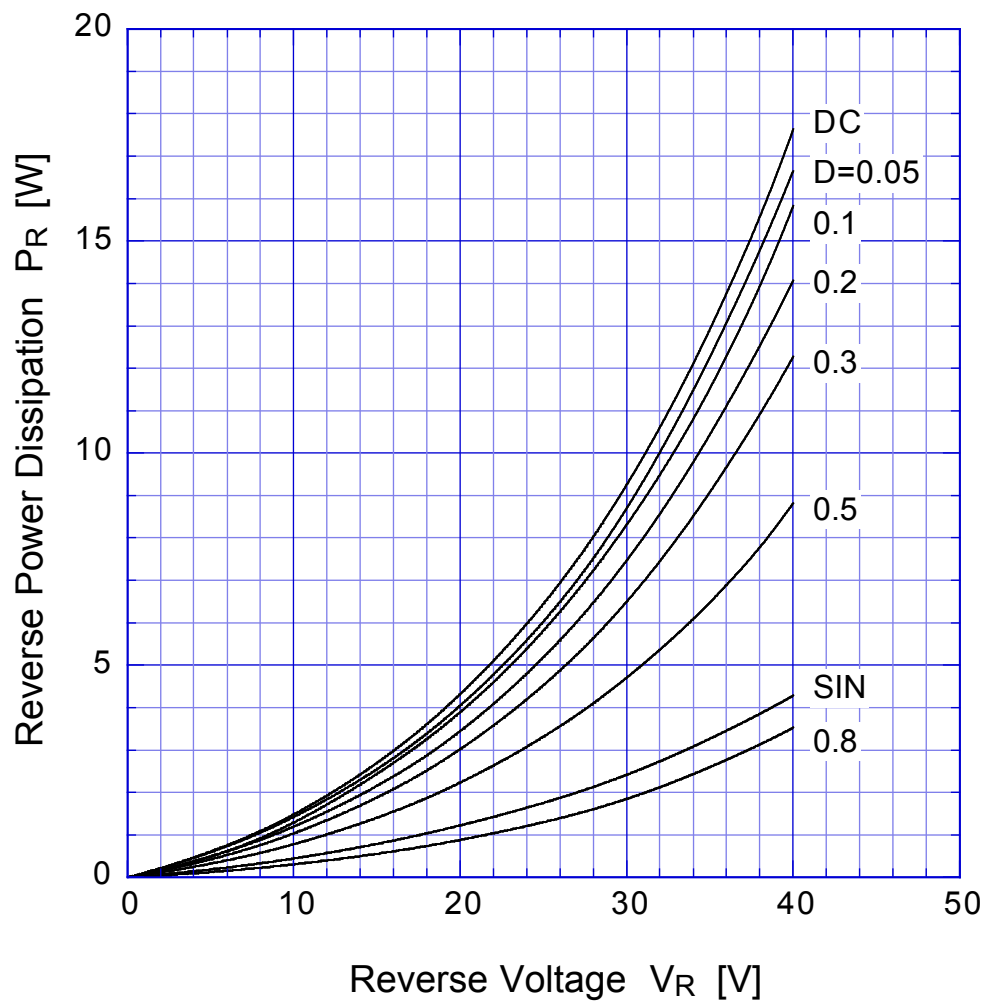
D10SC4MR Junction Capacitance



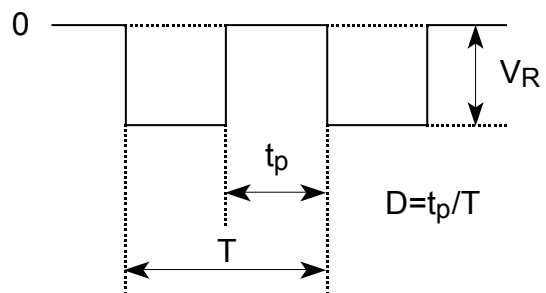
D10SC4MR Reverse Current



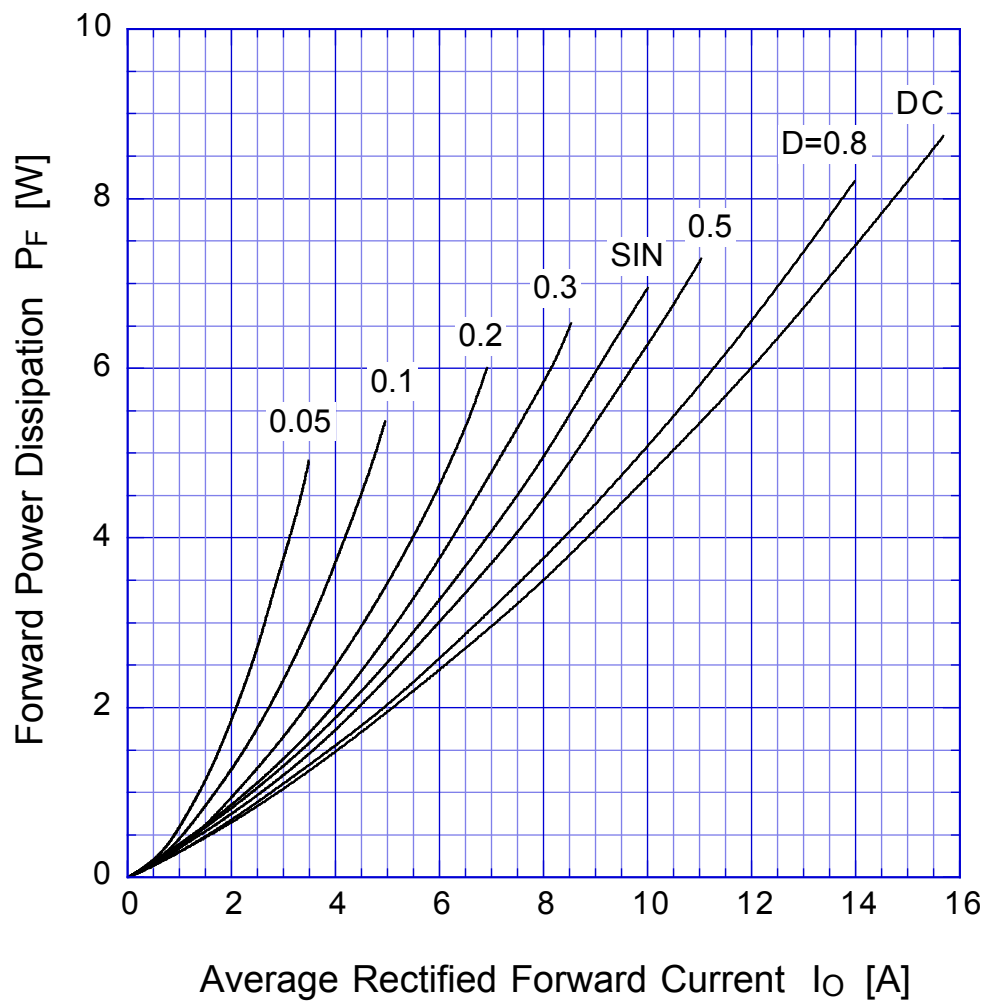
D10SC4MR Reverse Power Dissipation



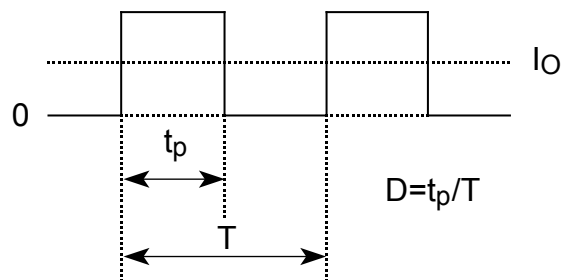
$T_j = 150^\circ\text{C}$



D10SC4MR Forward Power Dissipation

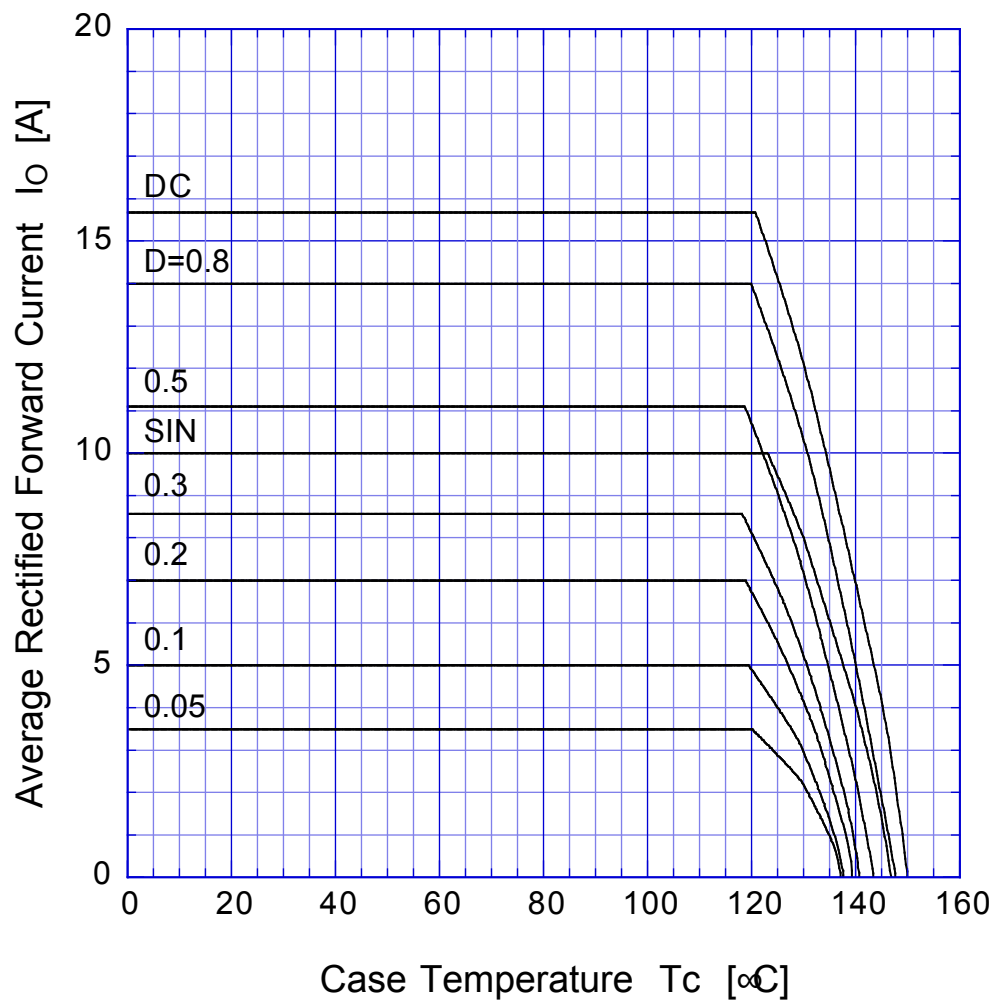


$T_J = 150^\circ\text{C}$

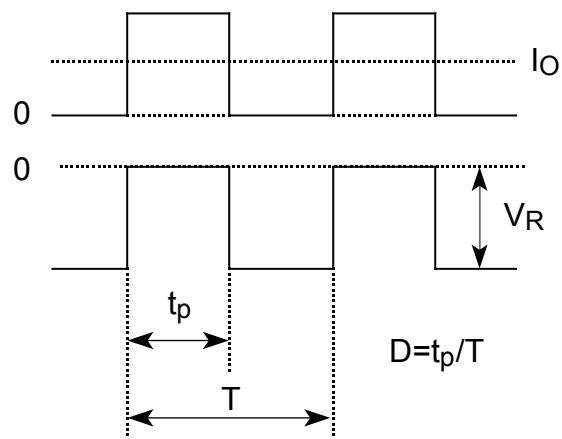


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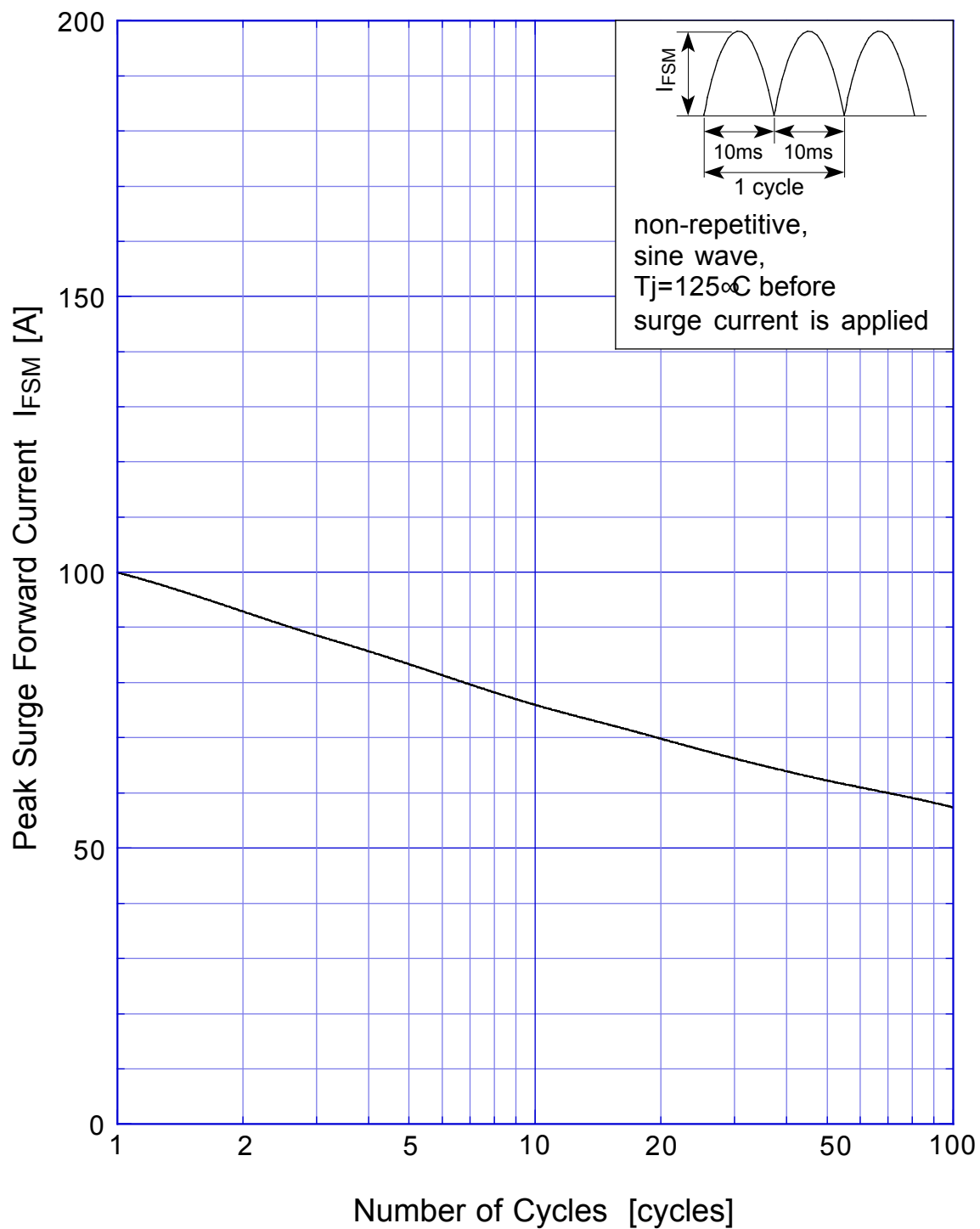
Derating Curve



$V_R = 20V$



D10SC4MR Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

