

Schottky Rectifiers (SBD)

Dual

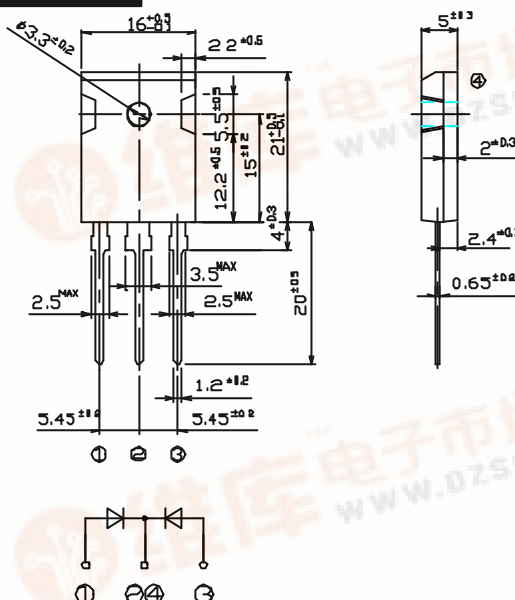
40V 30A

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

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

Case : MTO-3P

Unit : mm



RATINGS

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

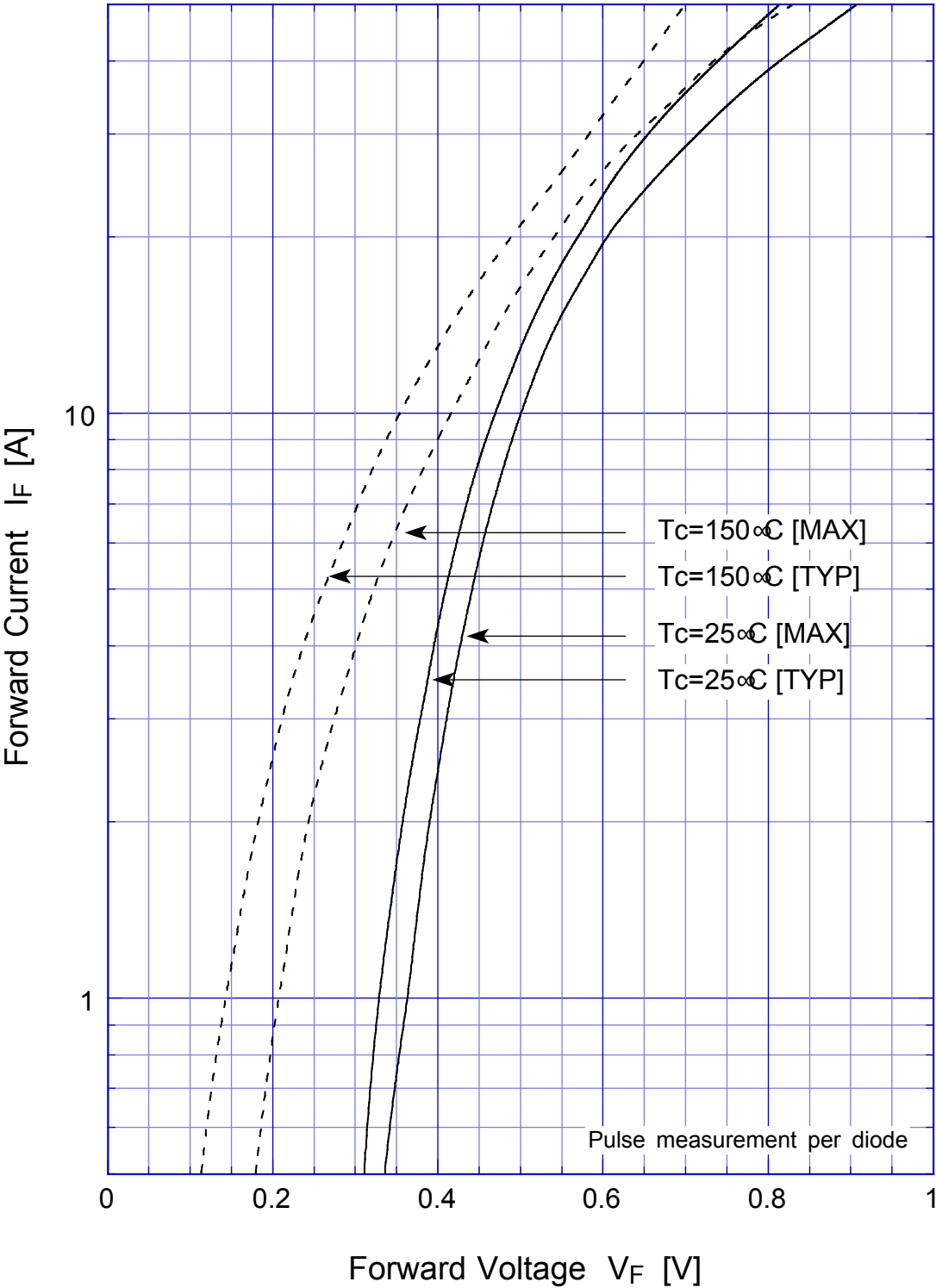
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V _{RM}		40	V
Repetitive Peak Surge Reverse Voltage	V _{RRSM}	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I _o	50Hz sine wave, R-load, Rating for each diode I _o /2, T _c =126	30	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 μs, Rating of per diode, T _j =25	1000	W
Mounting Torque	T _{OR}	(Recommended torque :0.5N·m)	0.8	N·m

- Electrical Characteristics (If not specified Tc=25)

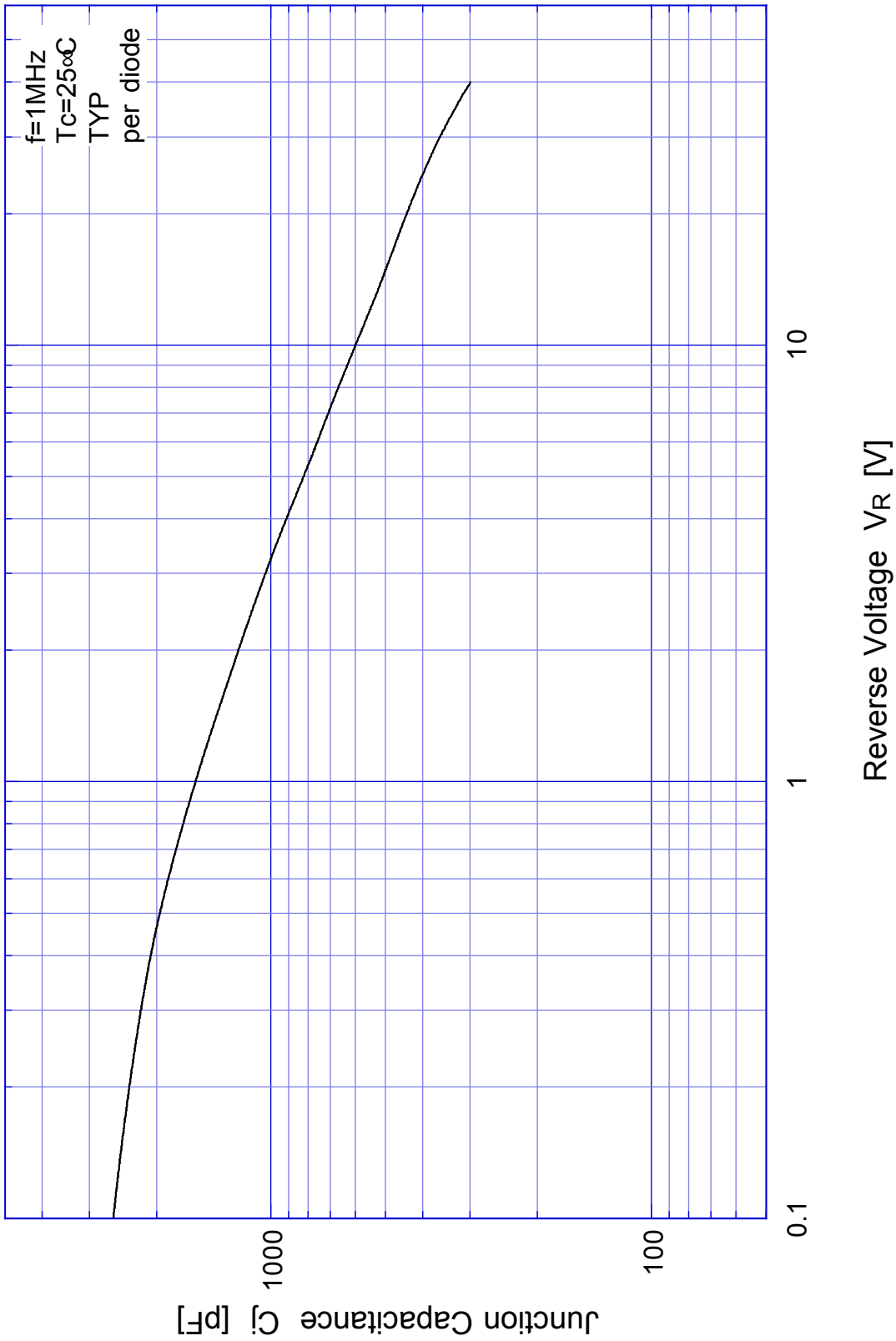
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=15A$, Pulse measurement, Rating of per diode	Max.0.55	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.10	mA
Junction Capacitance	C_j	$f=1MHz$, $V_R=10V$, Rating of per diode	Typ.590	pF
Thermal Resistance	θ_{jc}	junction to case	Max.1.0	/W

S30SC4M

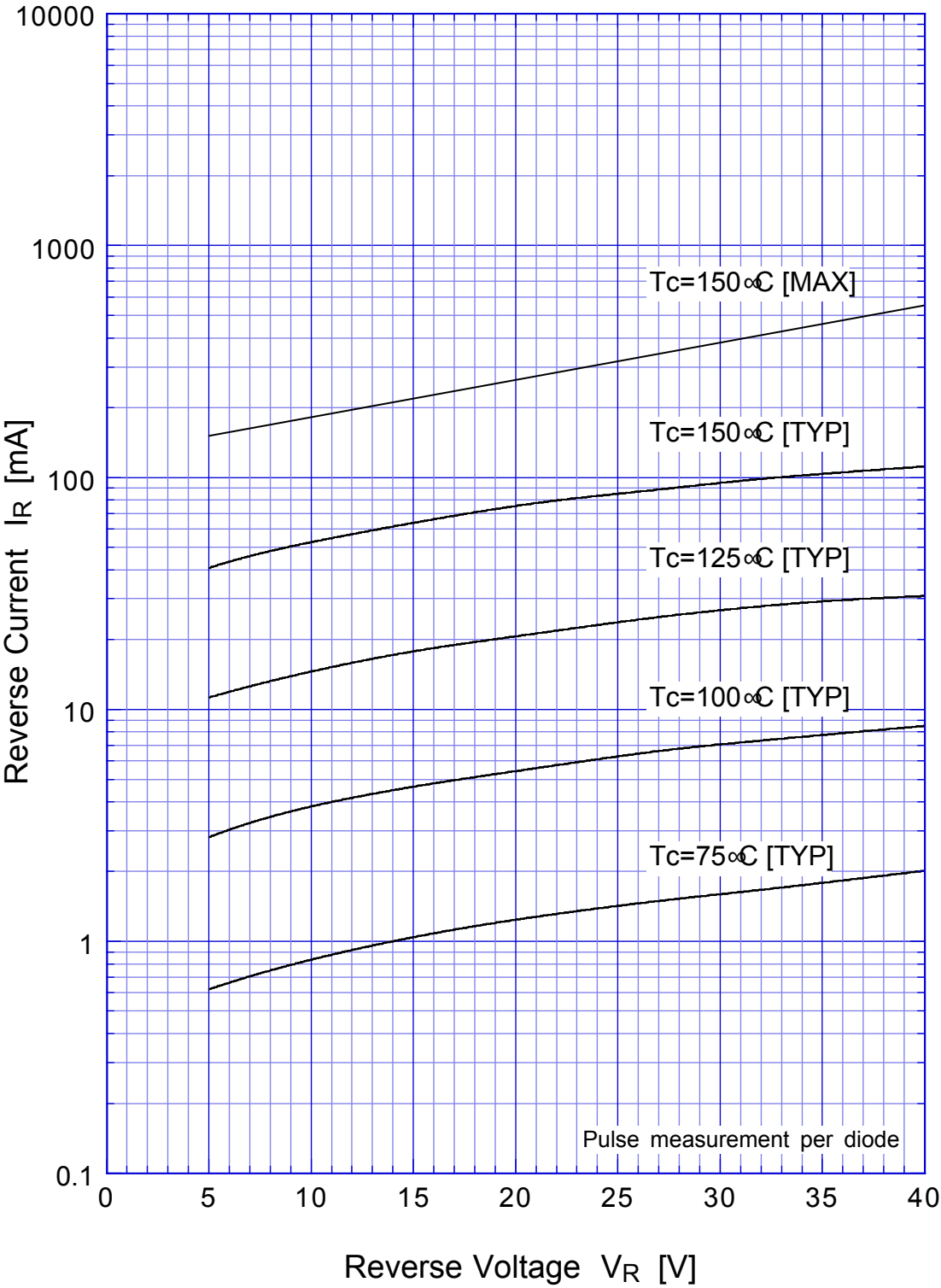
Forward Voltage



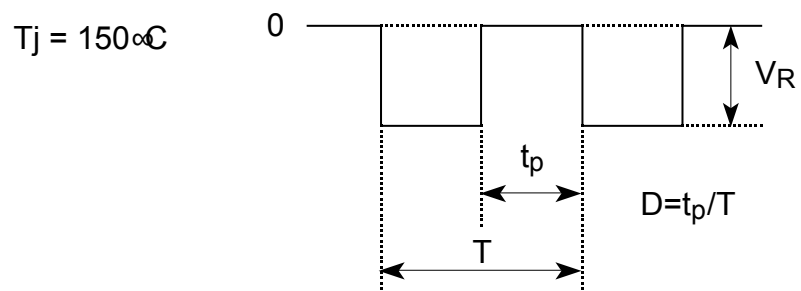
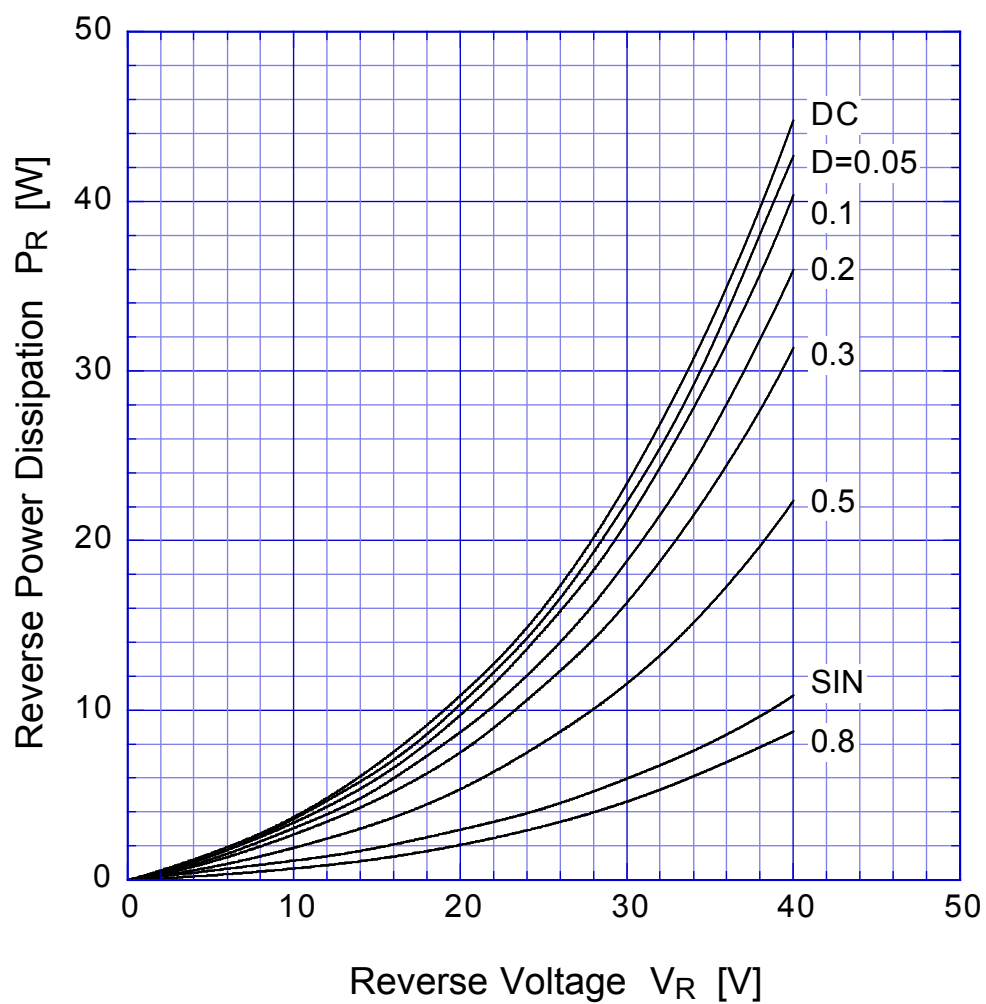
S30SC4M Junction Capacitance



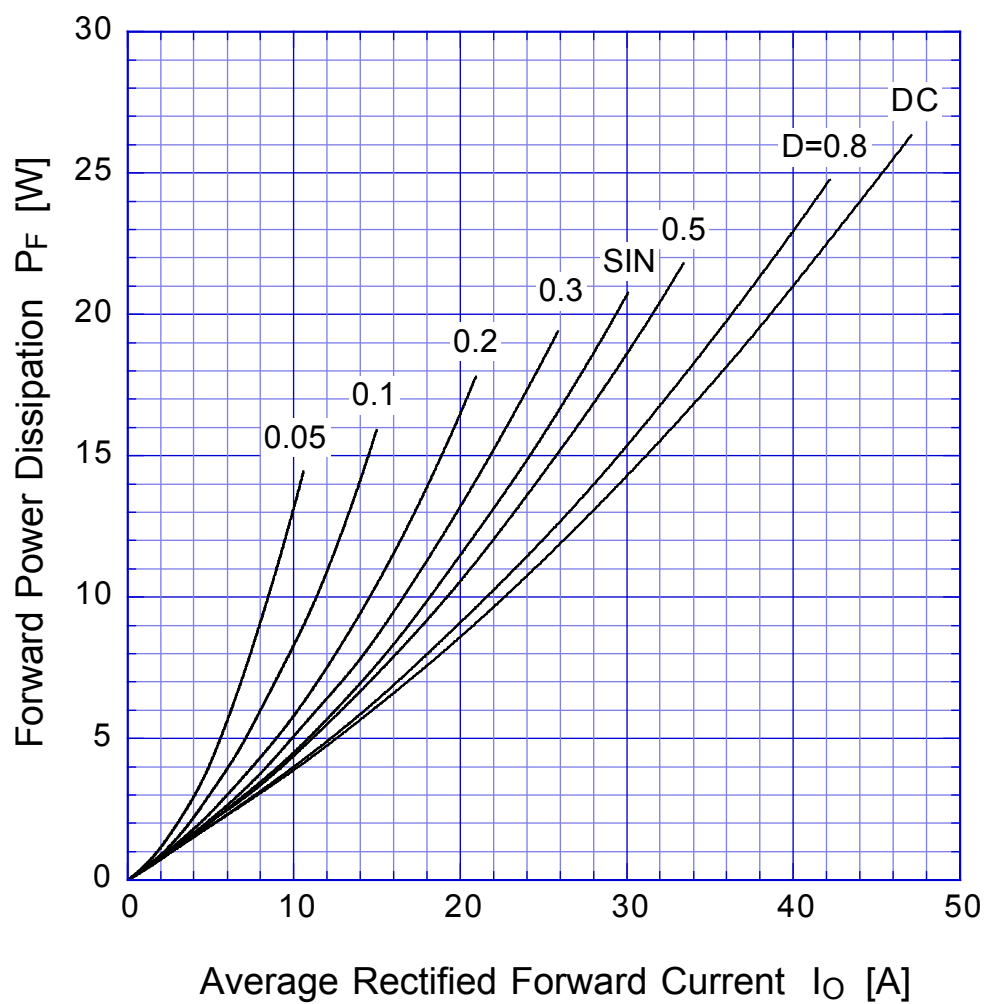
S30SC4M Reverse Current



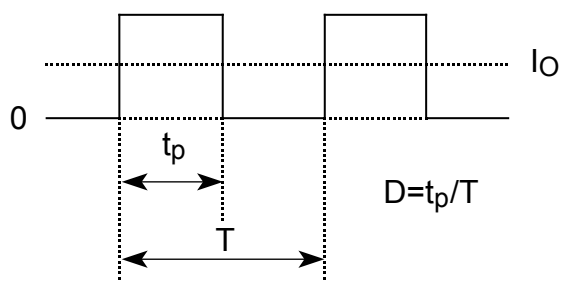
S30SC4M Reverse Power Dissipation



S30SC4M Forward Power Dissipation

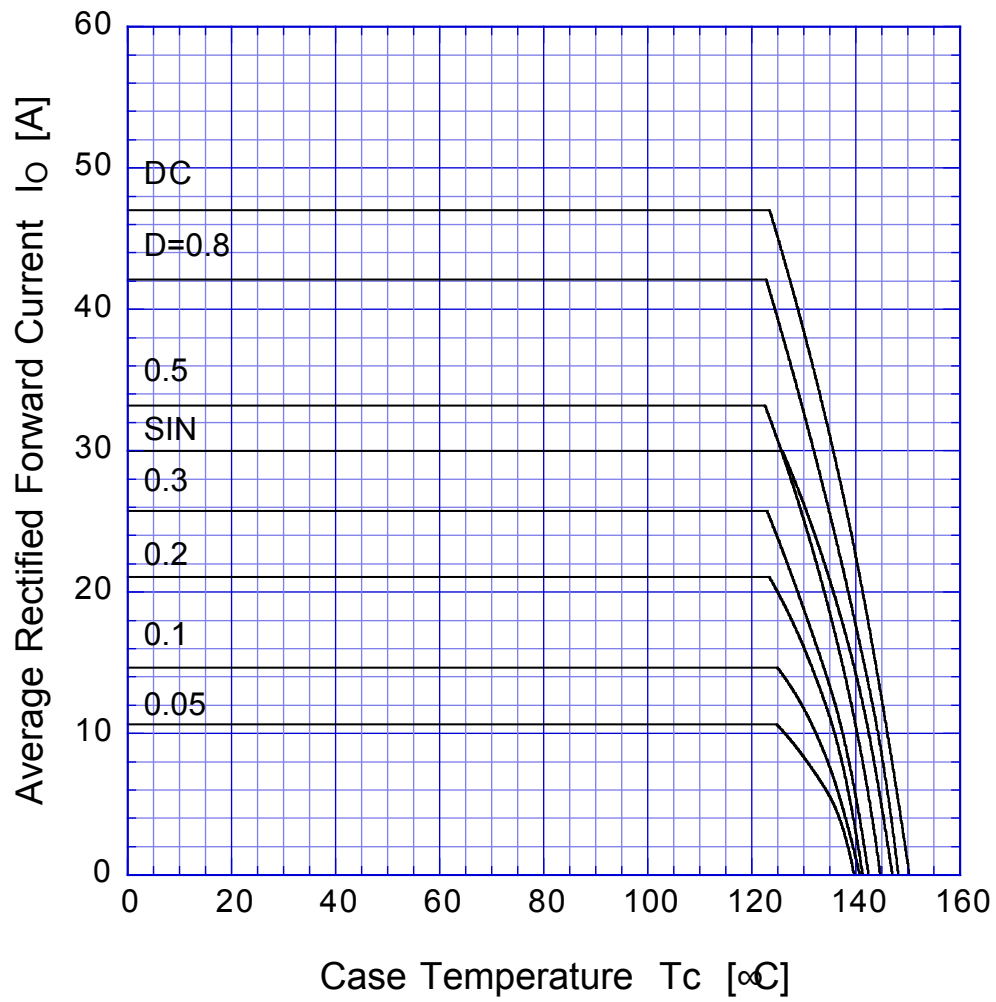


$T_j = 150^\circ\text{C}$

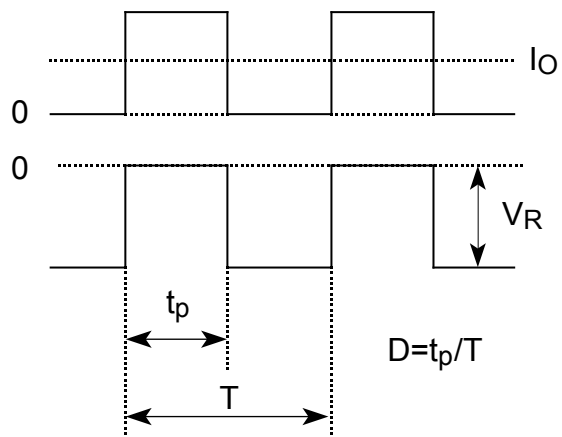


S30SC4M

Derating Curve

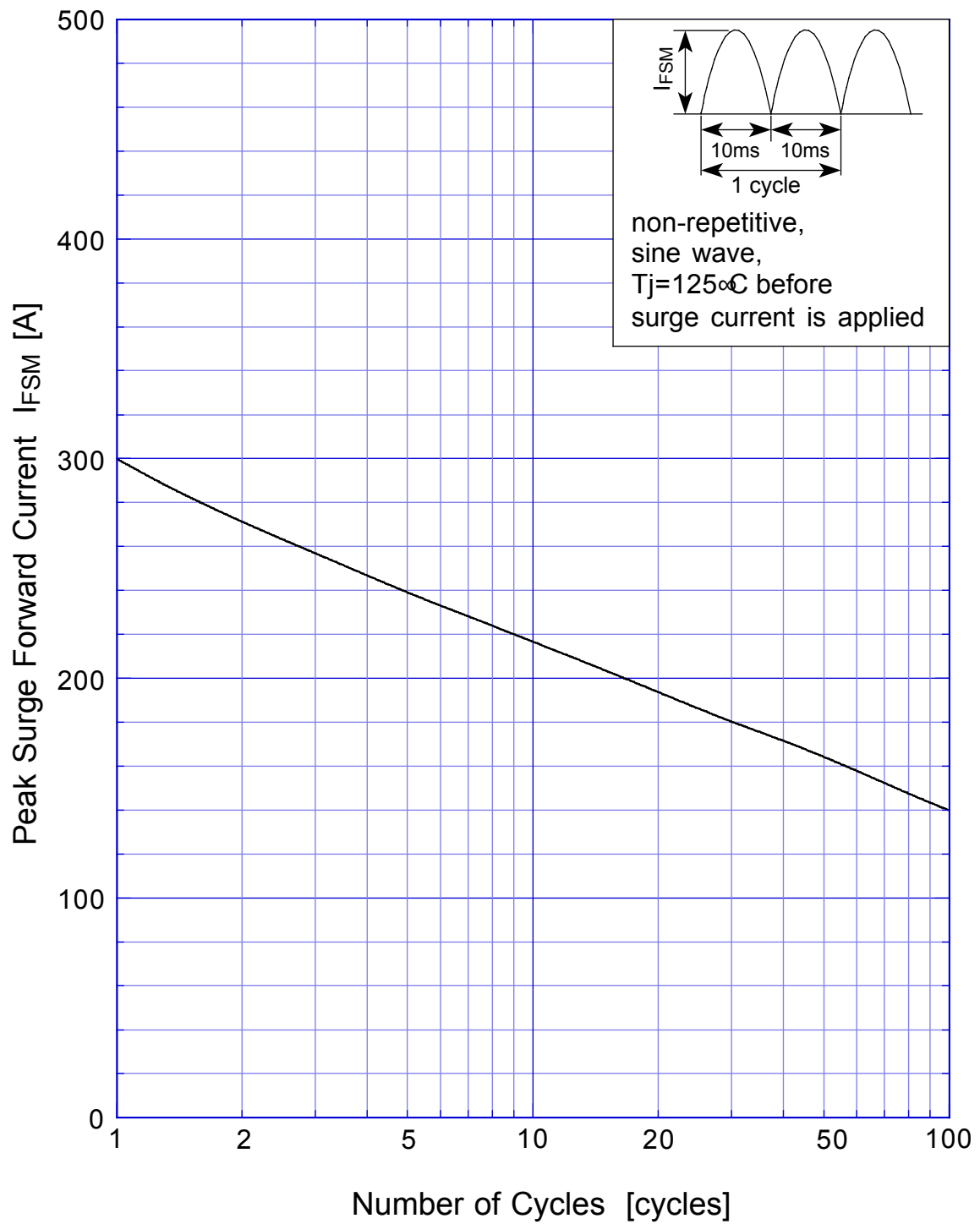


$V_R = 20\text{V}$

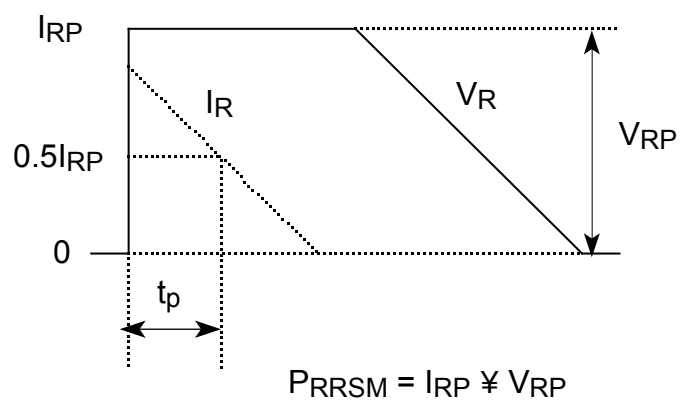
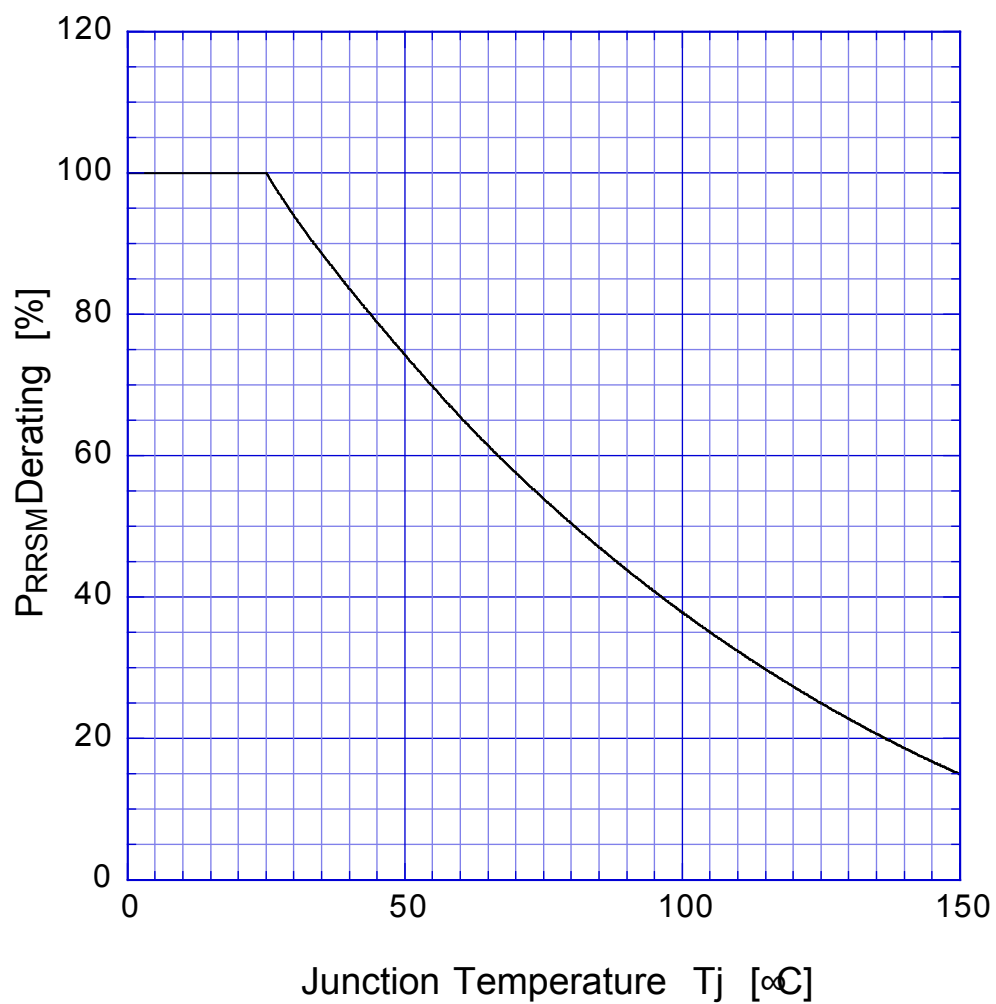


S30SC4M

Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



SBD

Repetitive Surge Reverse Power Capability

