

S20LC40

400V 20A

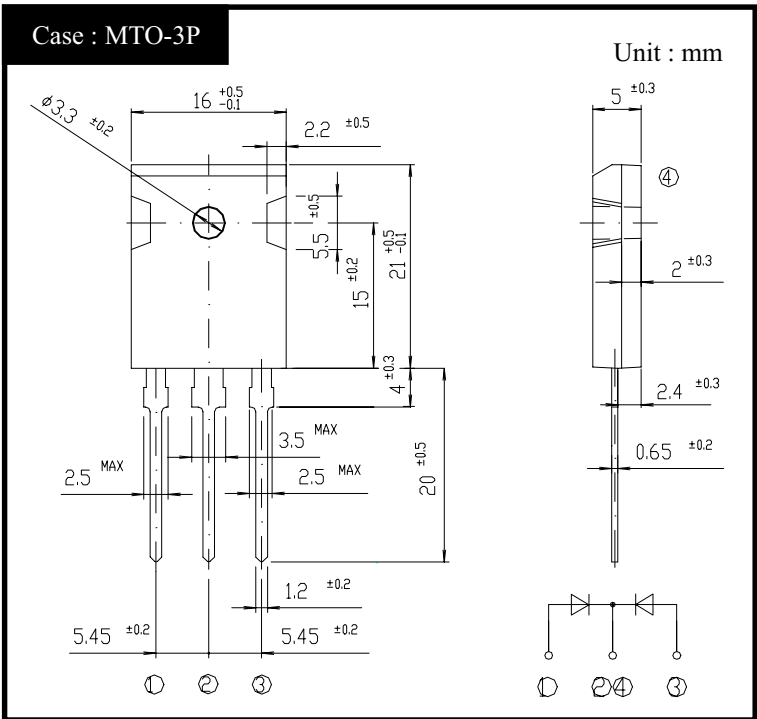
FEATURES

- Low noise
- trr50ns
- Small θ_{jc}

APPLICATION

- Switching power supply
- Free Wheel
- Home Appliances, Office Equipment, Factory Automation

OUTLINE DIMENSIONS



RATINGS

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

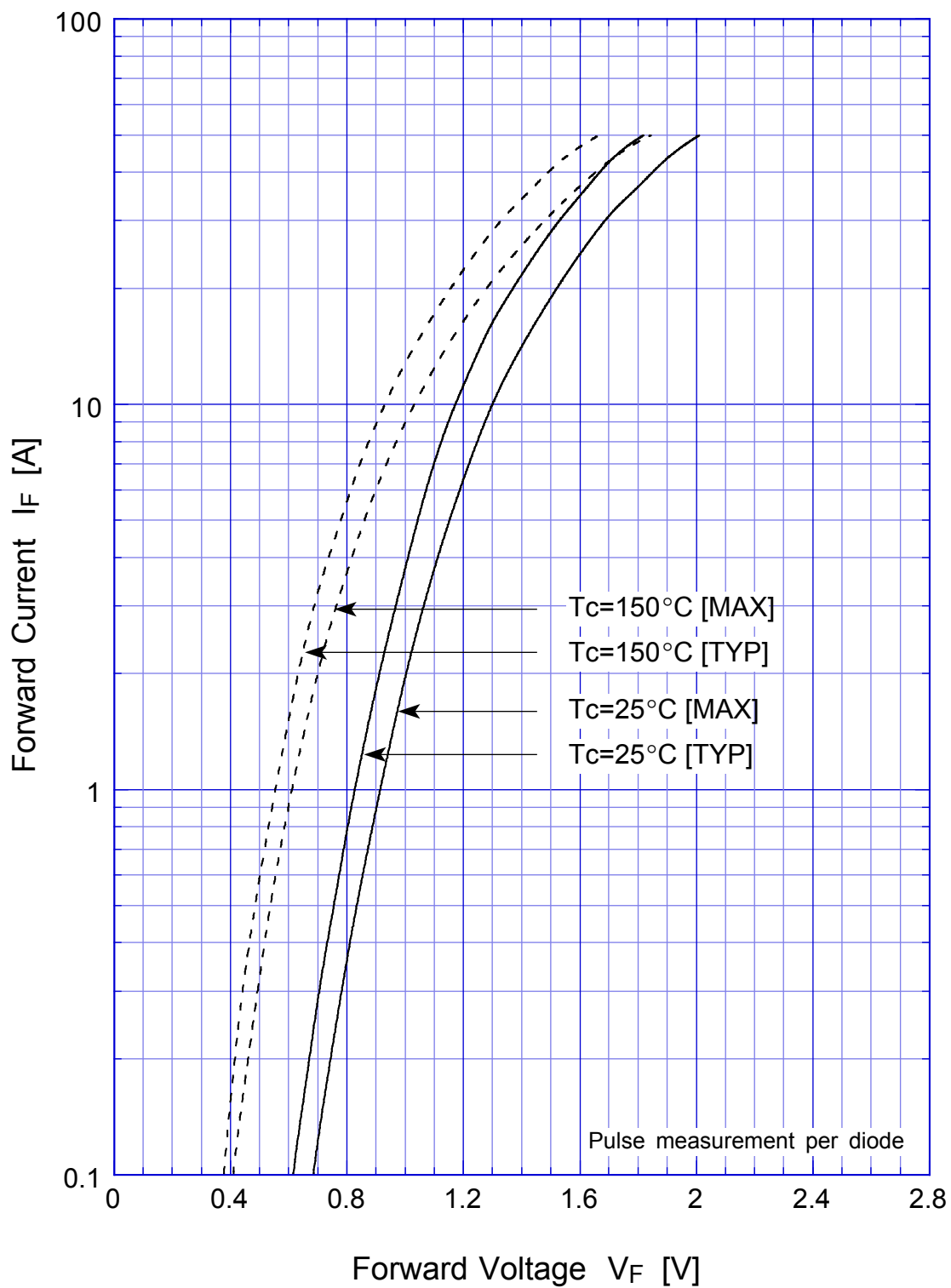
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	$^{\circ}\text{C}$
Operating Junction Temperature	T_j		150	$^{\circ}\text{C}$
Maximum Reverse Voltage	V_{RM}		400	V
Average Rectified Forward Current	I_o	50Hz sine wave, R-load, Rating for each diode $I_o/2$, $T_c=116^{\circ}\text{C}$	20	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^{\circ}\text{C}$	120	A
Mounting Torque	TOR	(Recommended torque:0.5N·m)	0.8	N·m

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

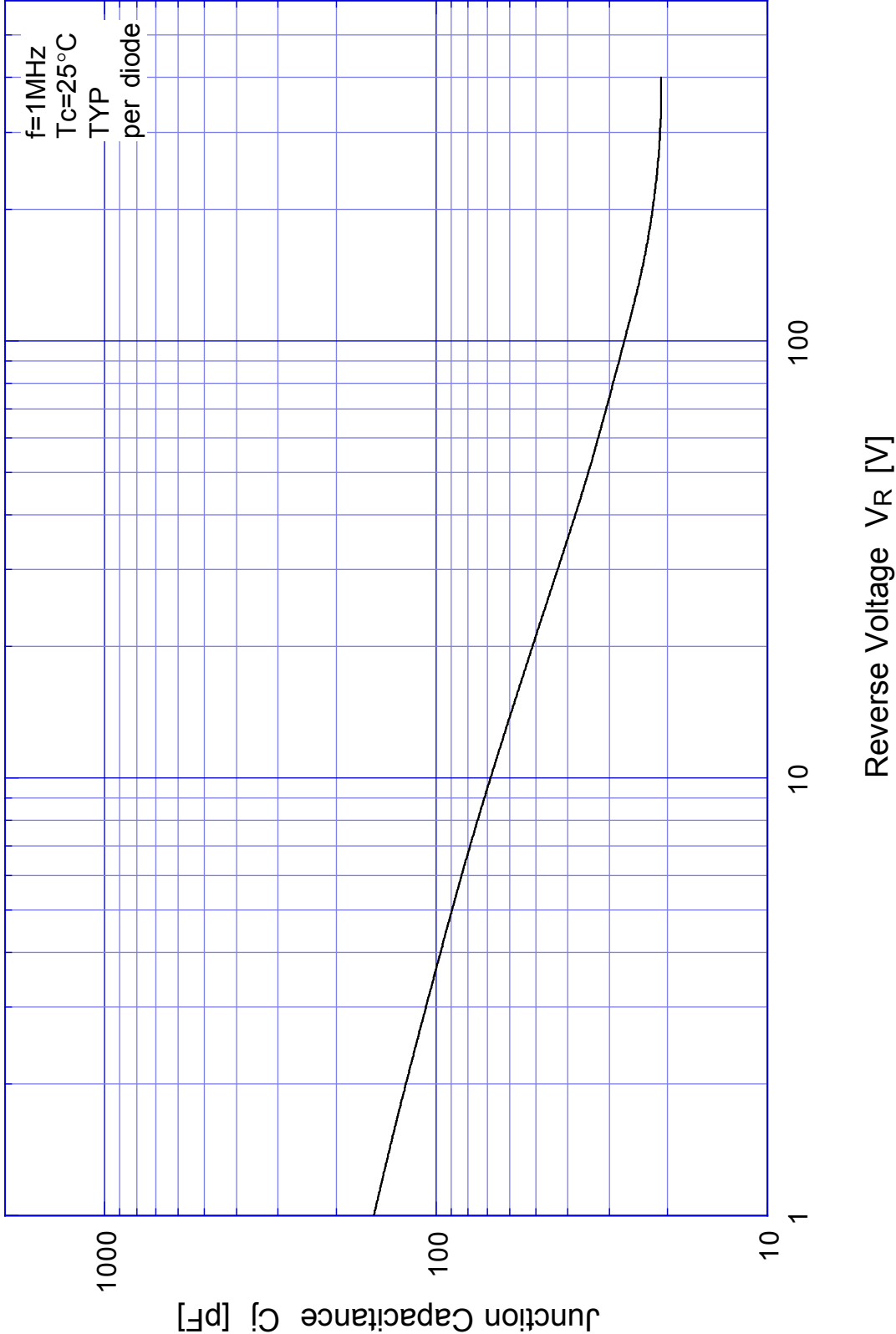
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=10\text{A}$, Pulse measurement, Rating of per diode	Max.1.3	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.10	μA
Reverse Recovery Time	trr	$I_F=0.5\text{A}$, $I_R=1\text{A}$, Rating of per diode	Max.50	ns
Thermal Resistance	θ_{jc}	junction to case	Max.1.2	$^{\circ}\text{C}/\text{W}$

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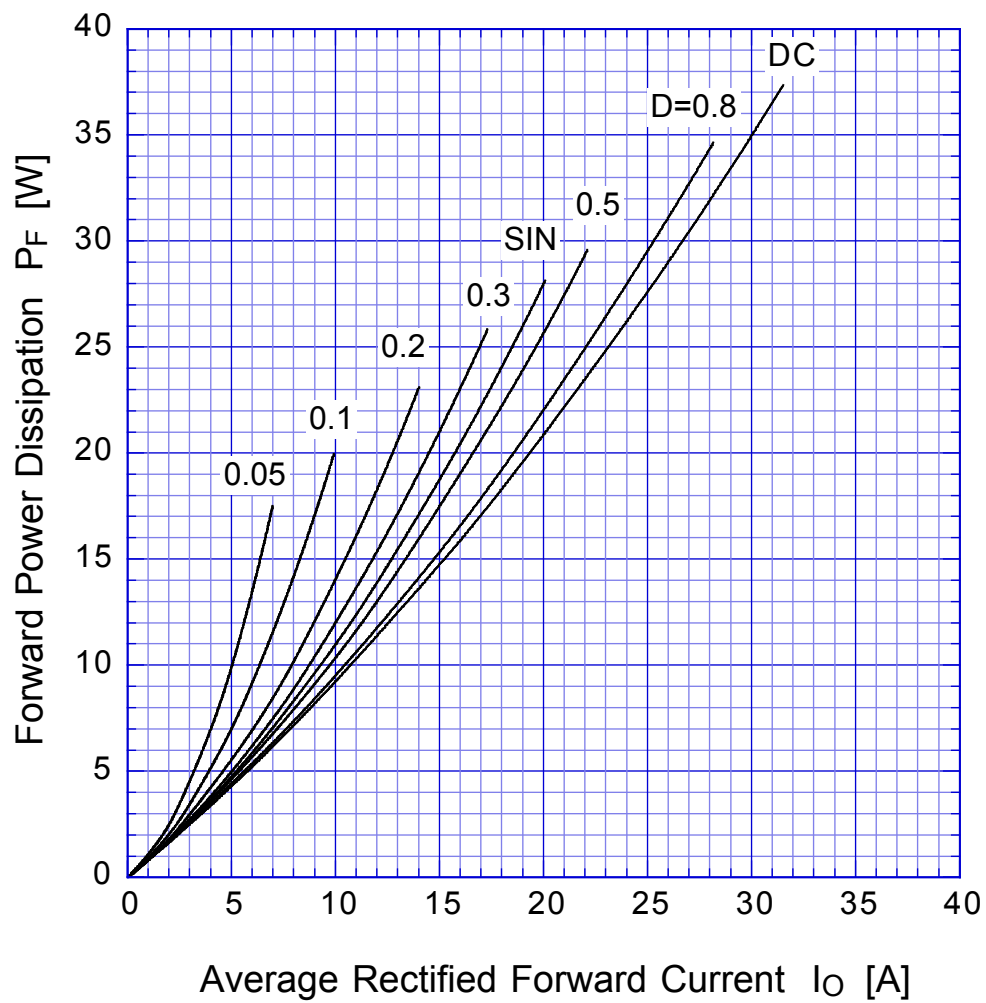
Forward Voltage



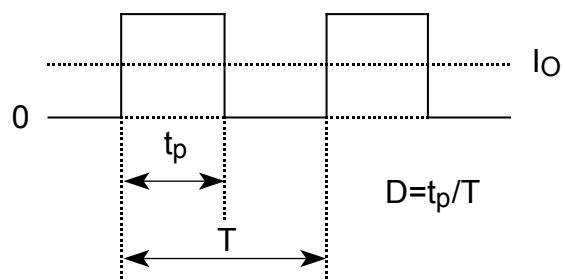
S20LC40 Junction Capacitance



S20LC40 Forward Power Dissipation

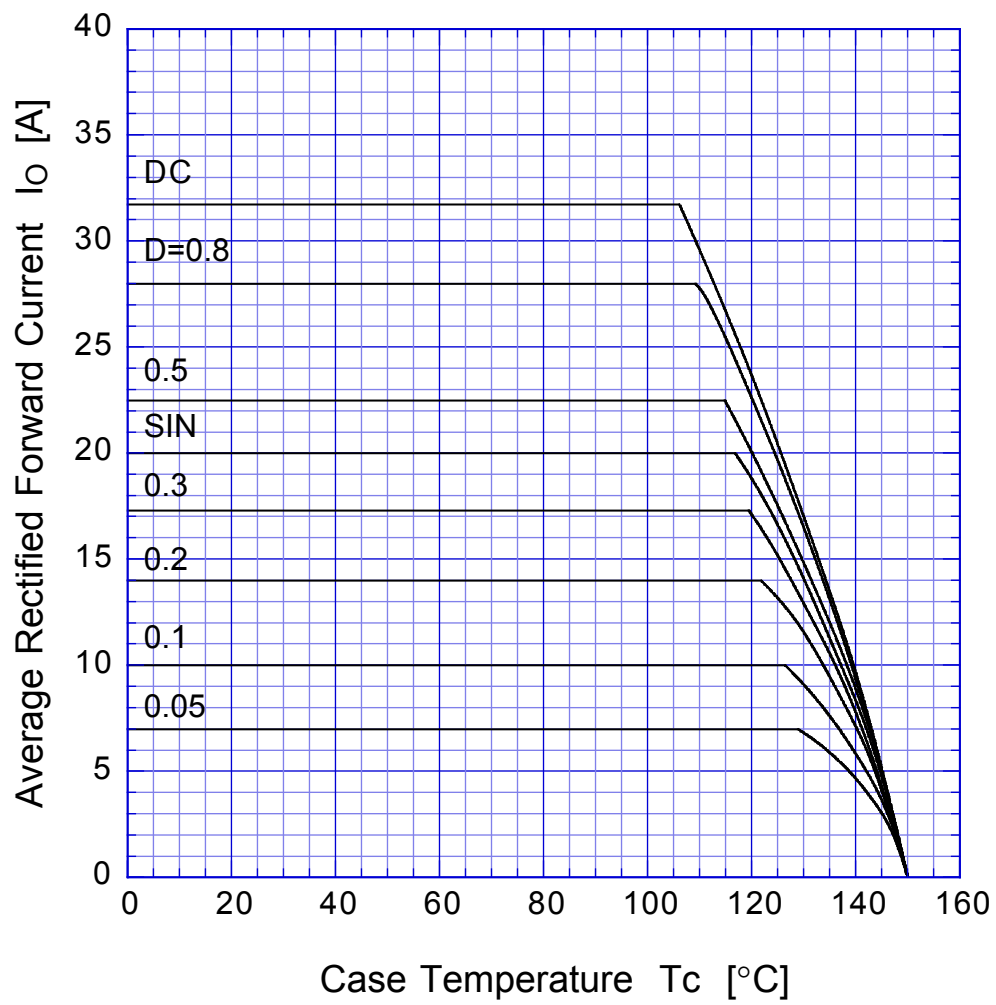


$T_j = T_{jmax}$

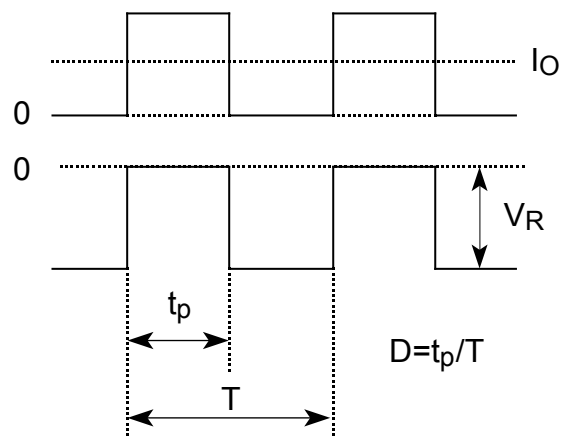


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Derating Curve



$$V_R = V_{RM}$$



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Peak Surge Forward Capability

