

SHINDENGEN

Super Fast Recovery Rectifiers

Dual

D10LC40

400V 10A

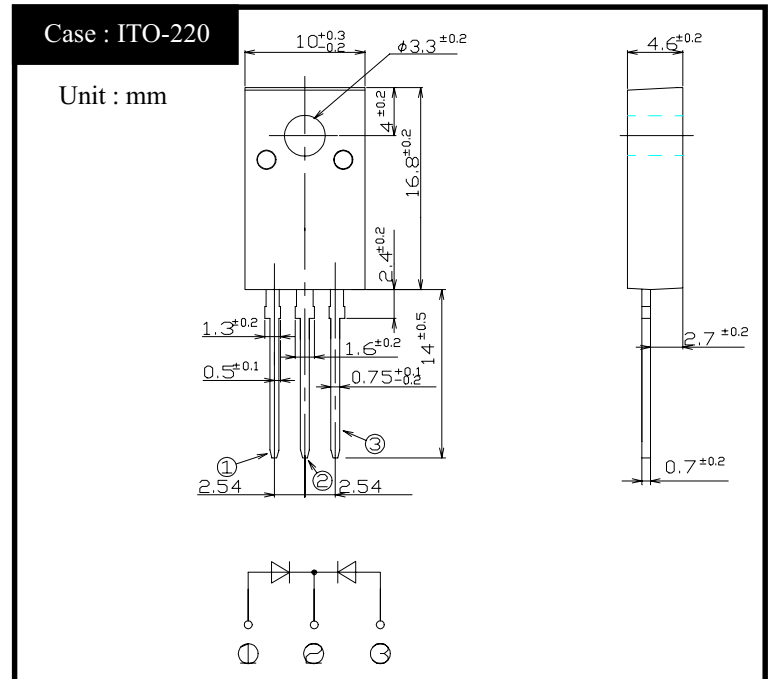
FEATURES

- Low noise
- trr50ns
- Fully Isolated Molding

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

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

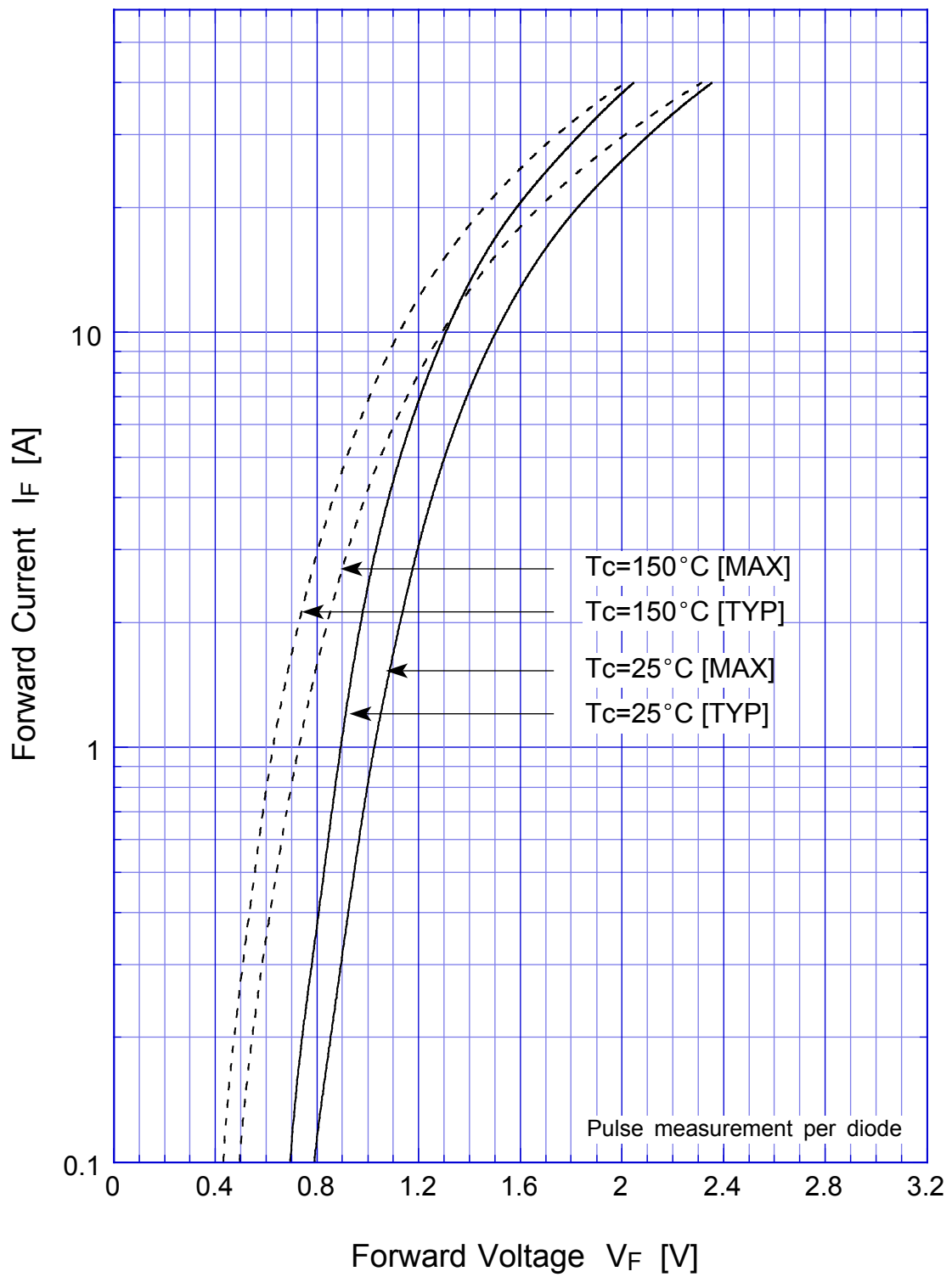
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		400	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, Rating for each diode $I_o/2$, $T_c=100^\circ\text{C}$	10	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	80	A
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	1.5	kV
Mounting Torque	TOR	(Recommended torque: $0.3\text{N}\cdot\text{m}$)	0.5	$\text{N}\cdot\text{m}$

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

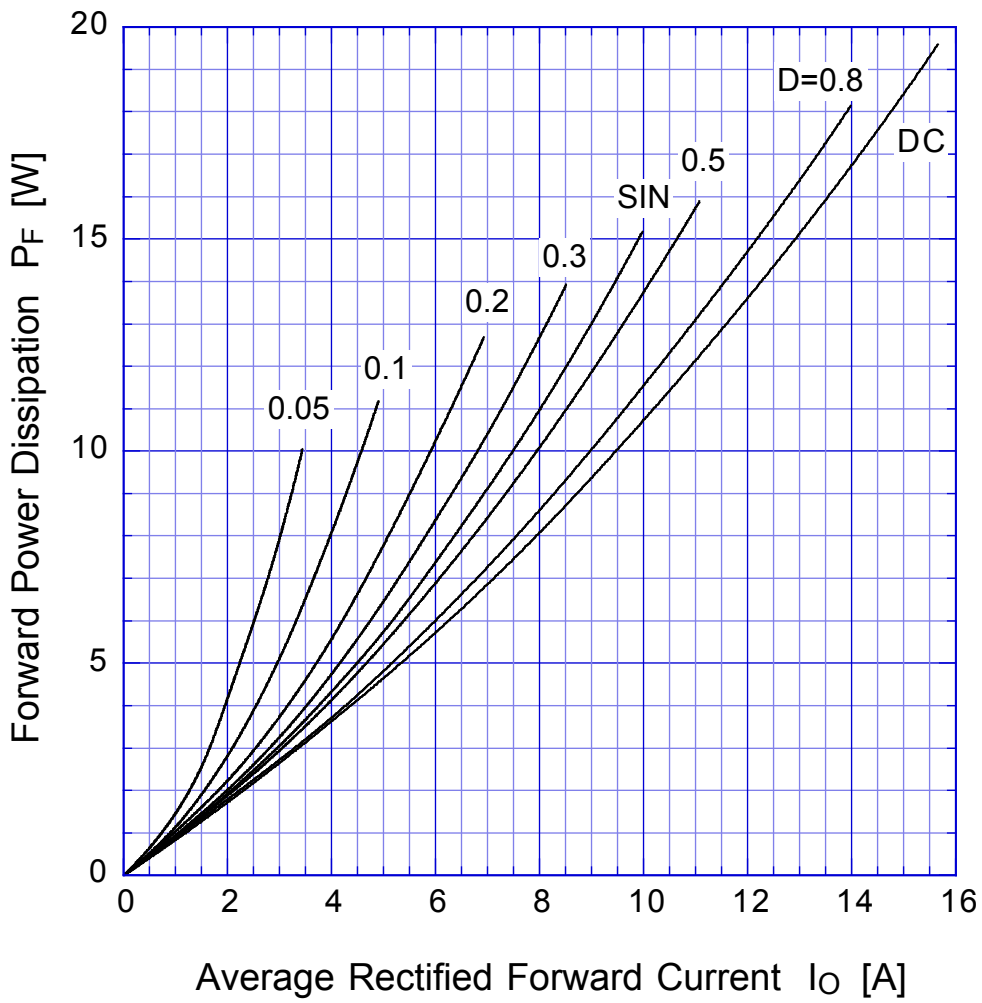
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=5\text{A}$, Pulse measurement, Rating of per diode	Max.1.3	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.10	μA
Reverse Recovery Time	trr	$I_F=0.5\text{A}$, $I_R=1\text{A}$, Rating of per diode	Max.50	ns
Thermal Resistance	θ_{jc}	junction to case	Max.3.3	$^\circ\text{C}/\text{W}$

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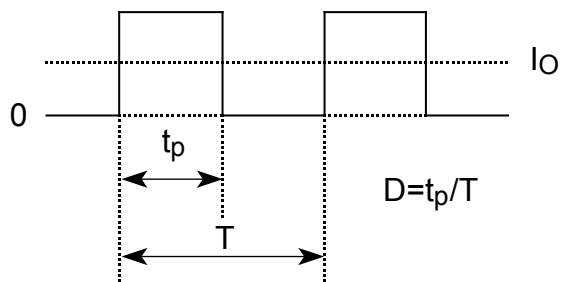
Forward Voltage



D10LC40 Forward Power Dissipation

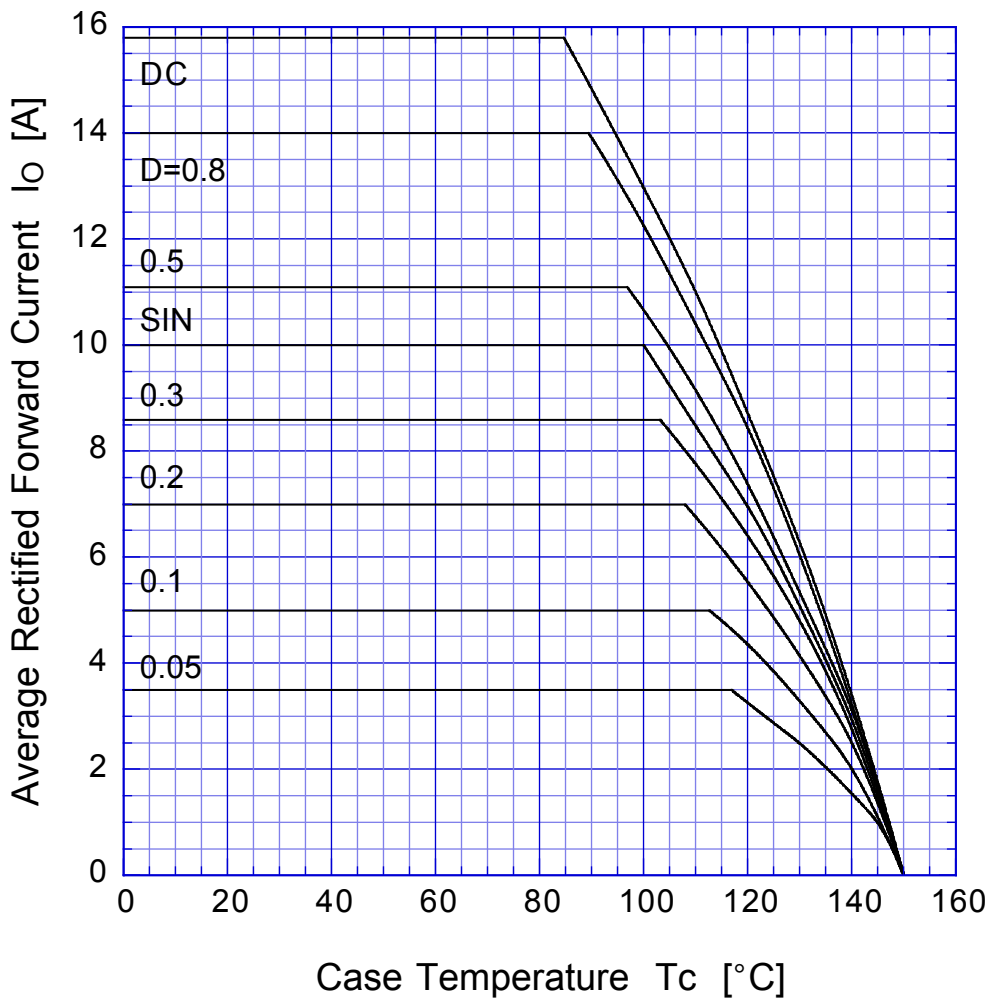


$T_j = T_{jmax}$



D10LC40

Derating Curve

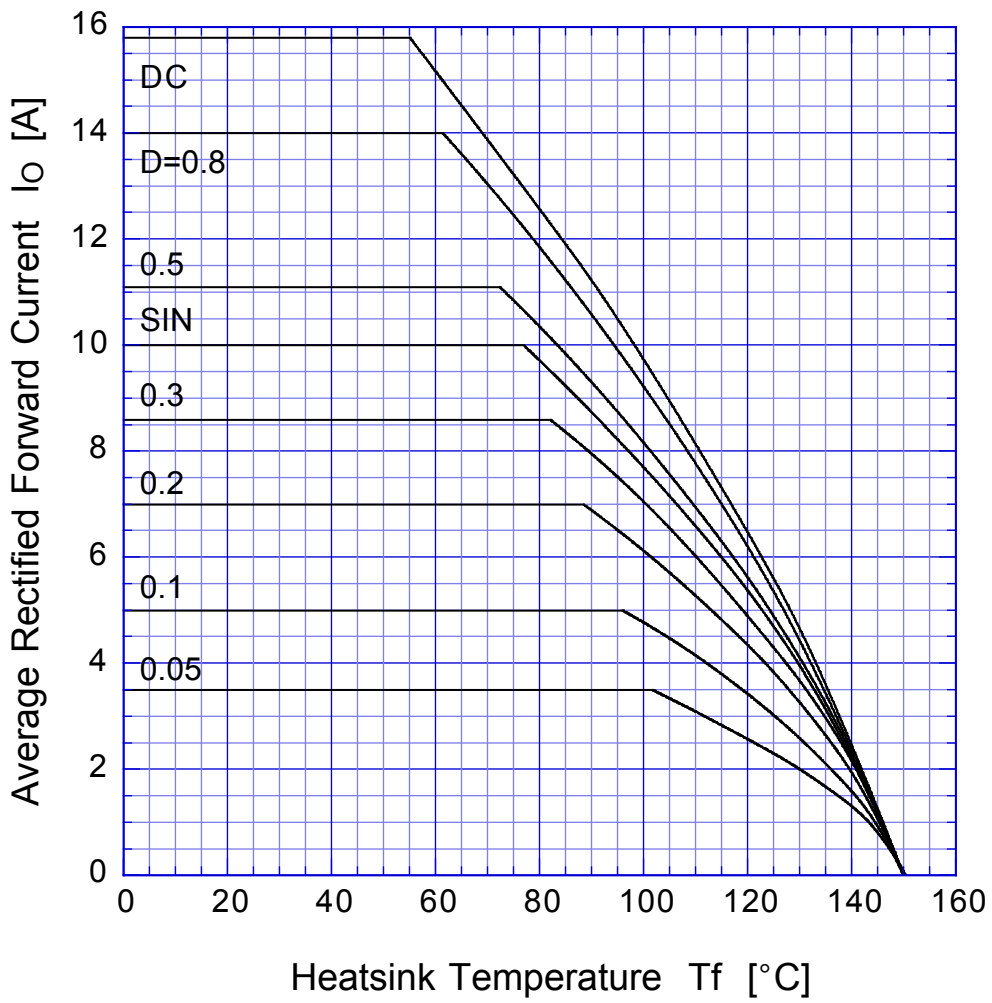


$$V_R = V_{RM}$$



D10LC40

Derating Curve

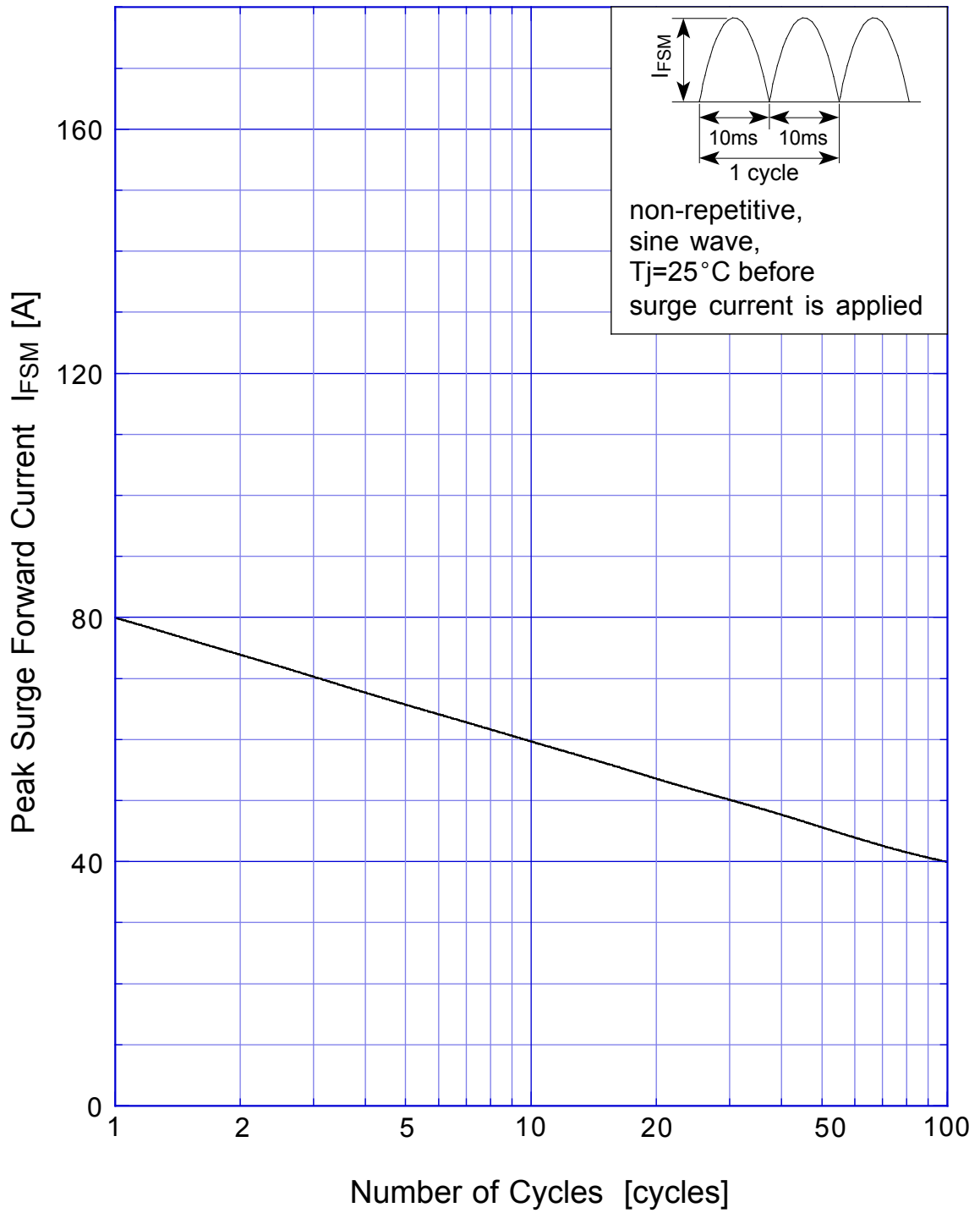


$$V_R = V_{RM}$$



D10LC40

Peak Surge Forward Capability



D10LC40 Junction Capacitance

