

SHINDENGEN

Super Fast Recovery Rectifiers

Dual

D8LC40

400V 8A

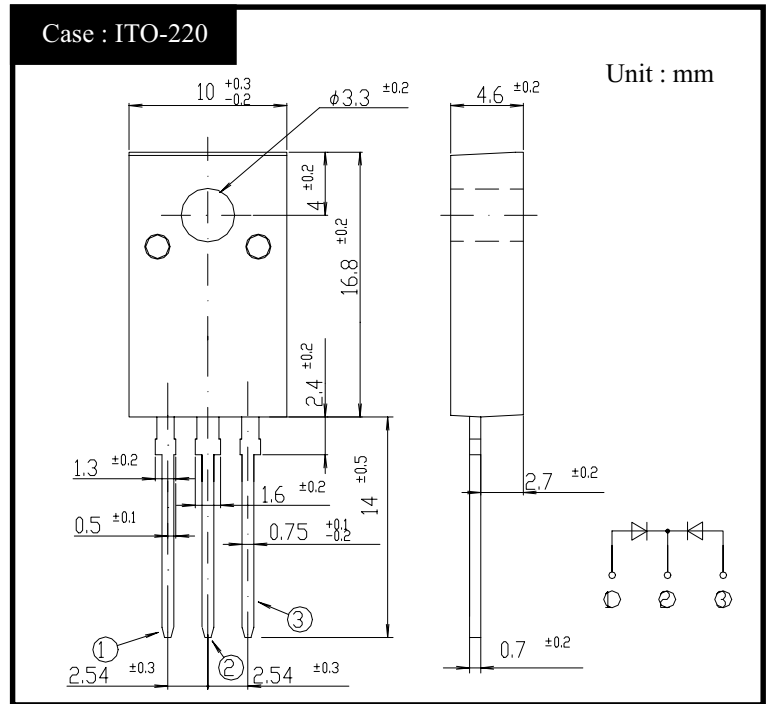
FEATURES

- 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 $T_c=25^\circ\text{C}$)

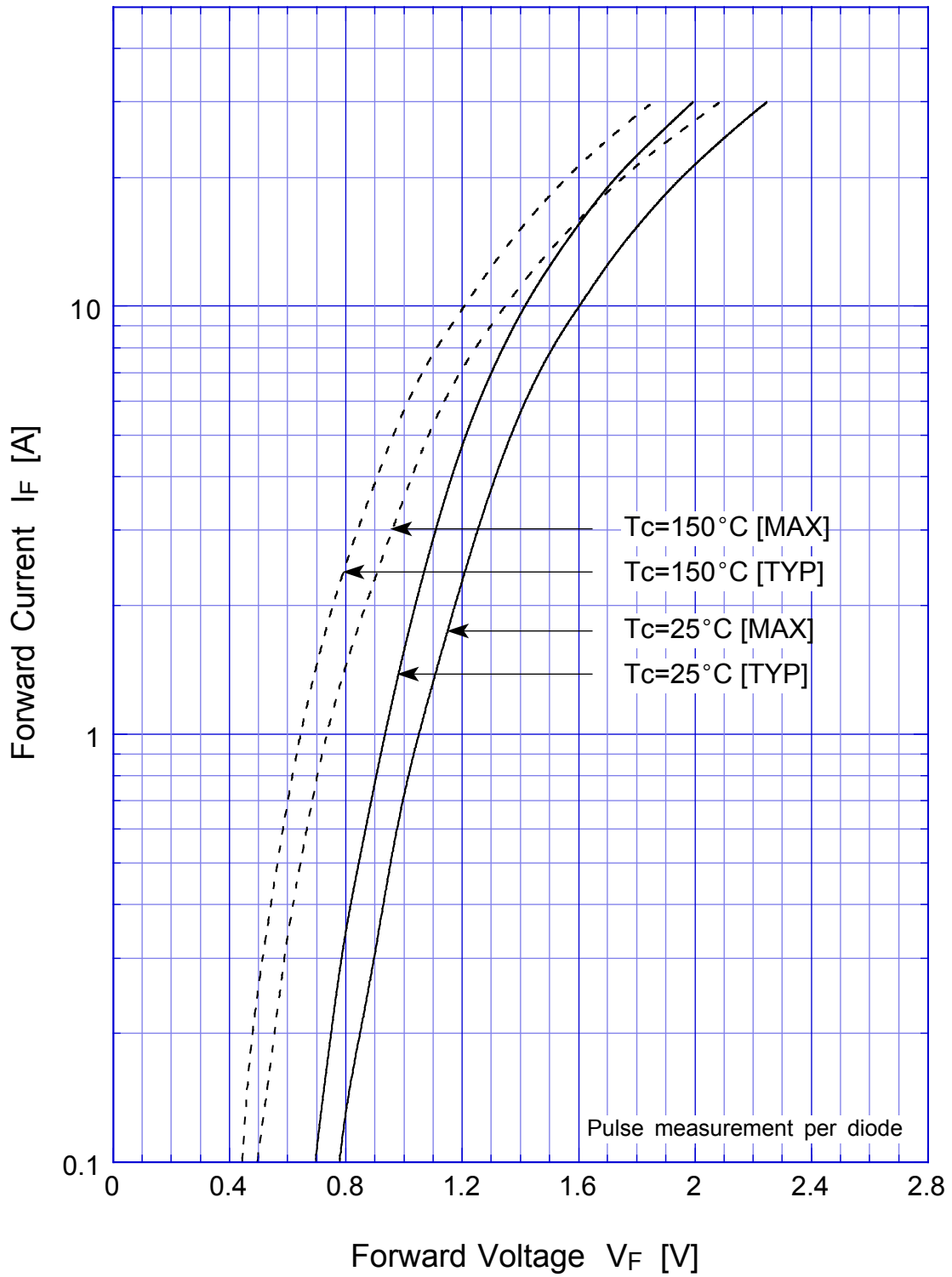
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		400	V
Average Rectified Forward Current	I_o	50Hz sine wave, R-load, Rating for each diode $I_o/2$, $T_c=114^\circ\text{C}$	8	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	60	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	$I_F=4\text{A}$, 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	t_{rr}	$I_F=0.5\text{A}$, $I_R=1\text{A}$, Rating of per diode	Max 50	ns
Thermal Resistance	θ_{jc}	junction to case	Max 3.3	$^\circ\text{C}/\text{W}$
	θ_{jf}	junction to heatsink (reference value)	Max 4.8	

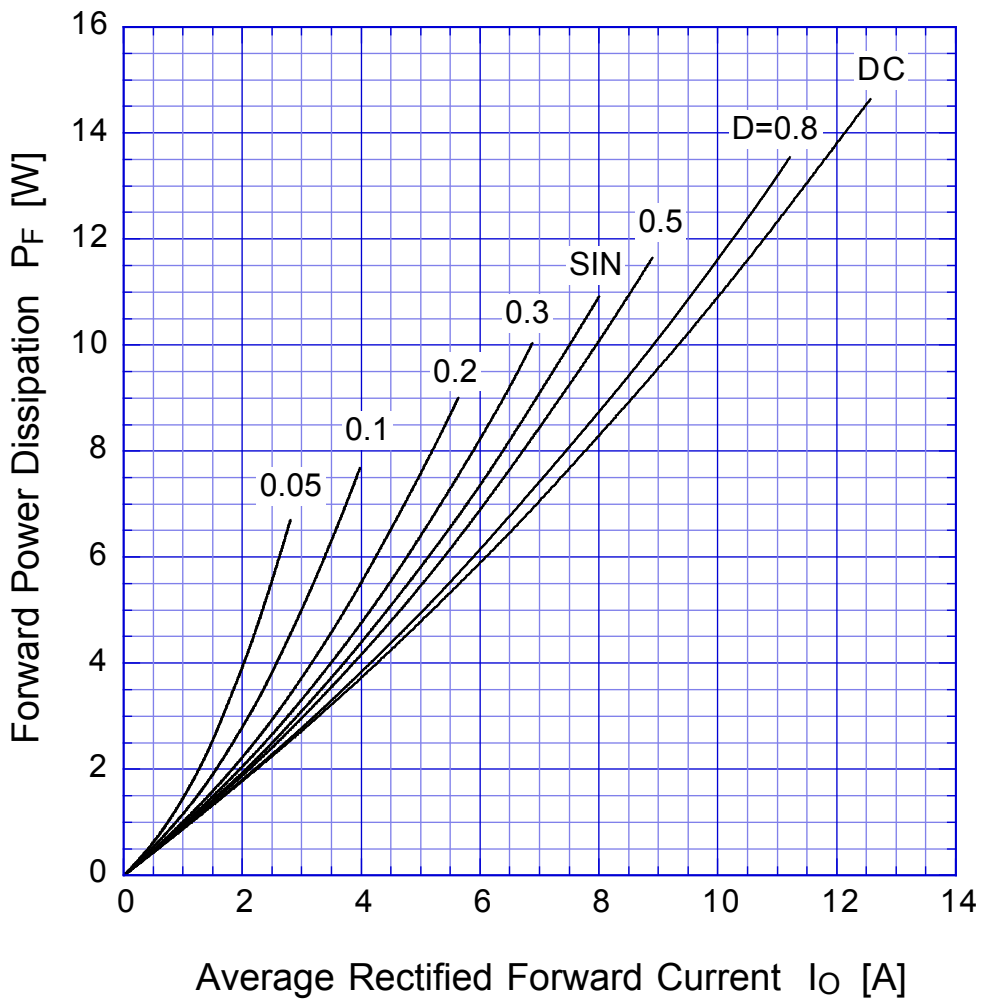
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Forward Voltage

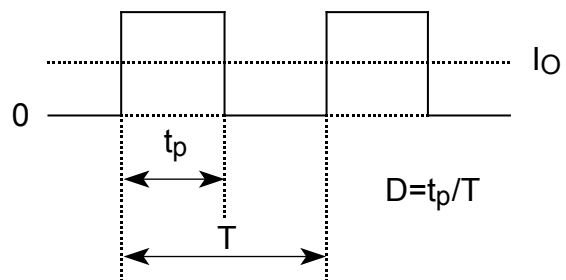


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Forward Power Dissipation

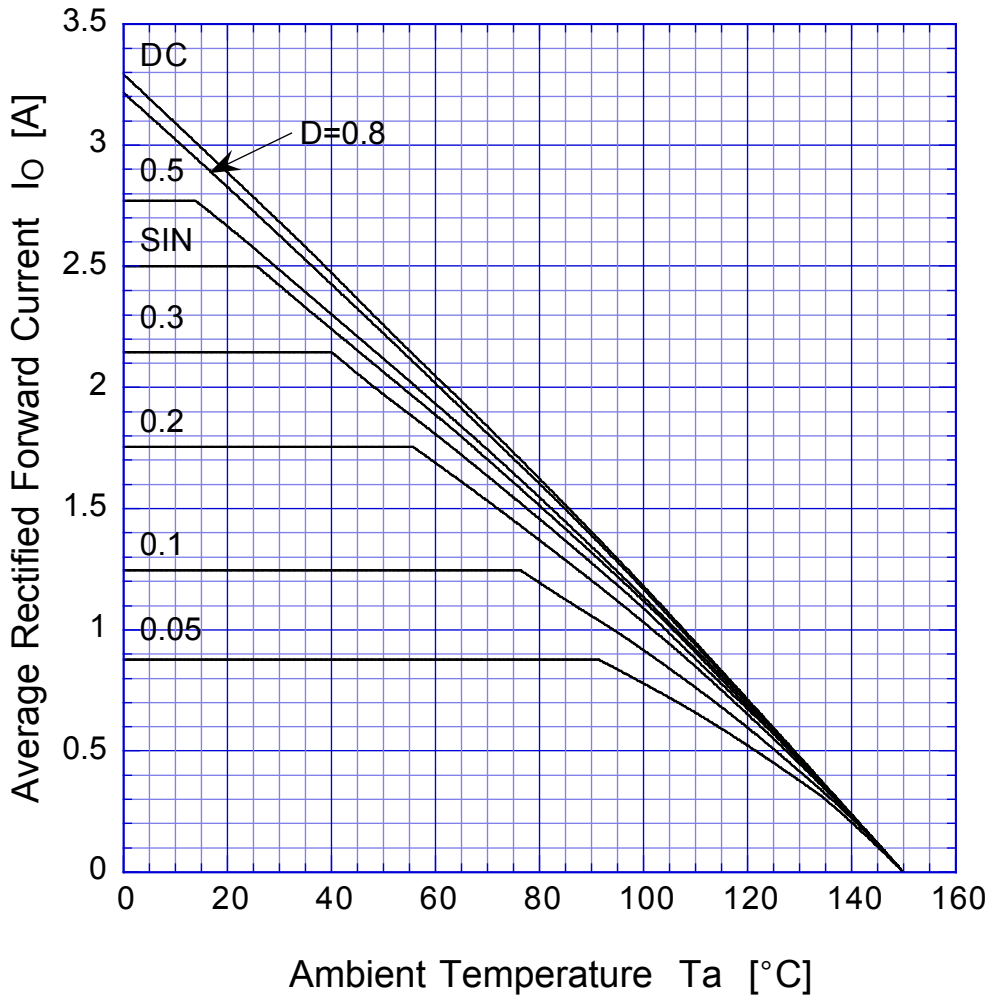


$T_j = 150^\circ\text{C}$

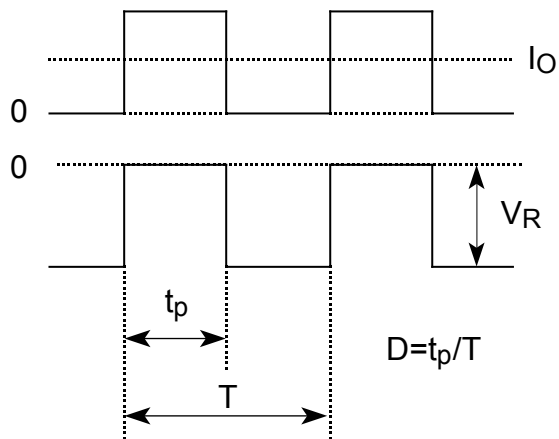


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Derating Curve

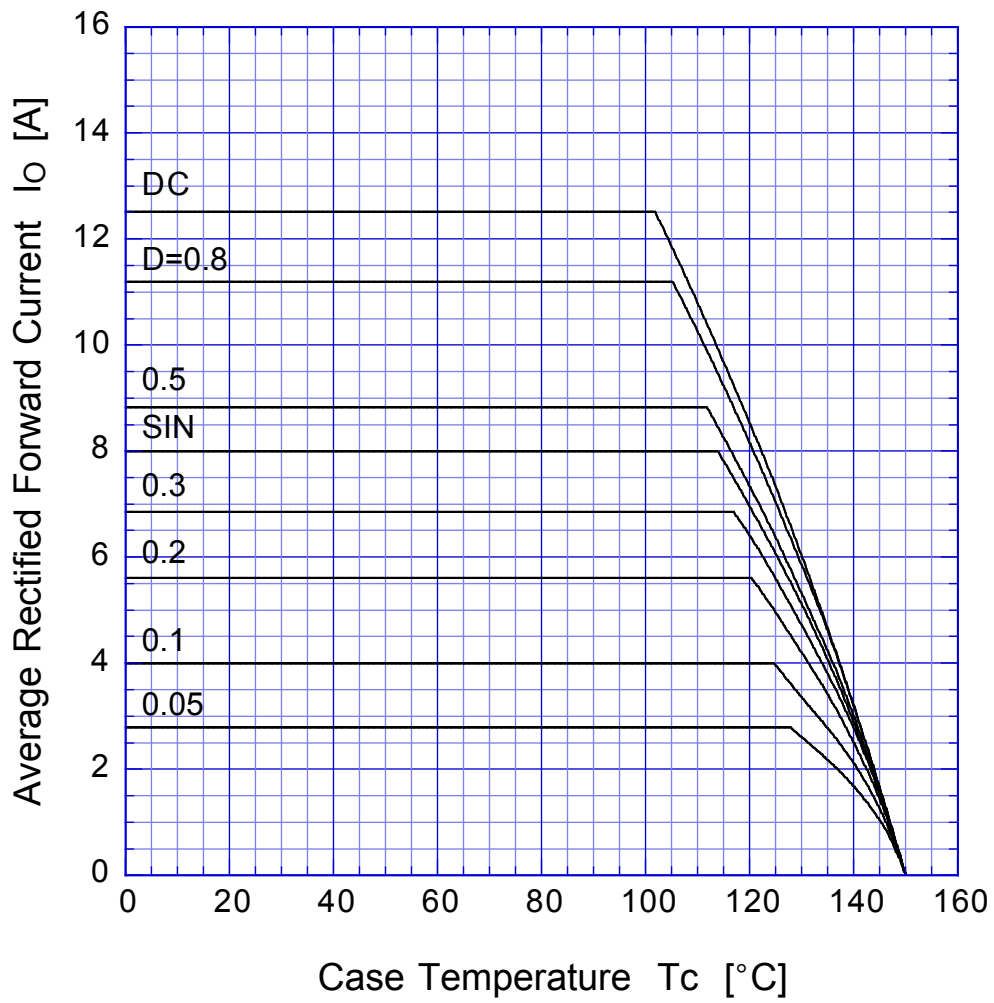


$$V_R = V_{RM}$$



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Derating Curve

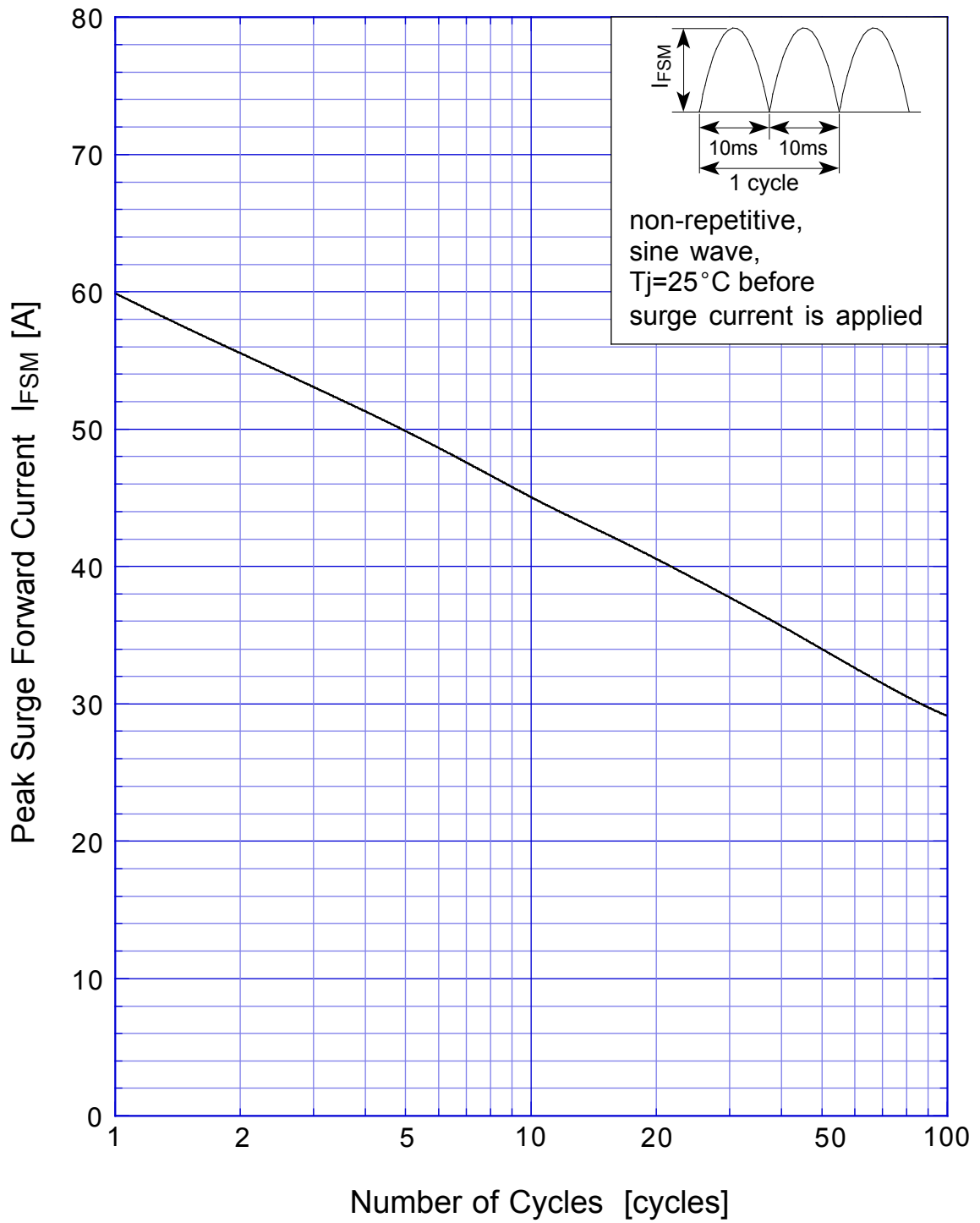


$$V_R = V_{RM}$$



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Peak Surge Forward Capability



D8LC40 Junction Capacitance

