

# SHINDENGEN

## Super Fast Recovery Rectifiers

Dual

# D5LC40

## 400V 5A

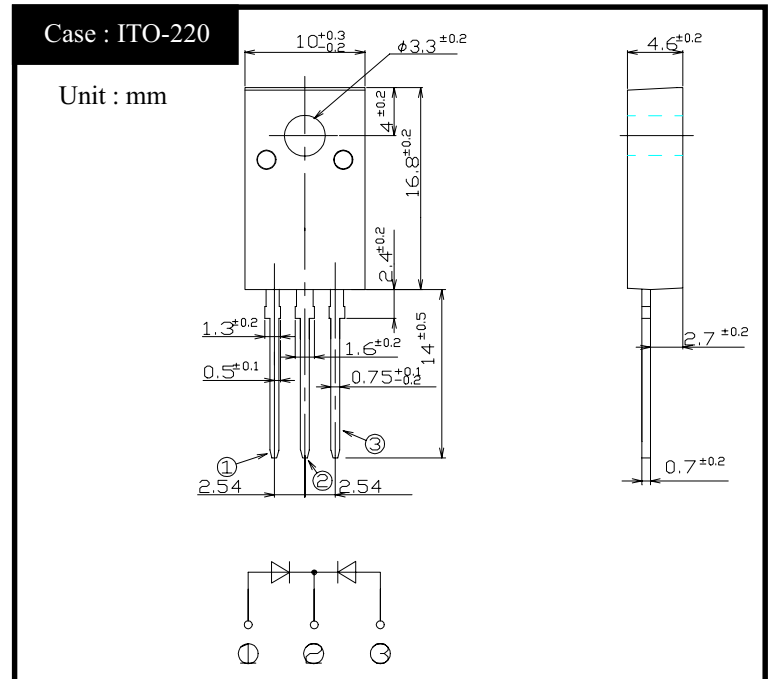
### FEATURES

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

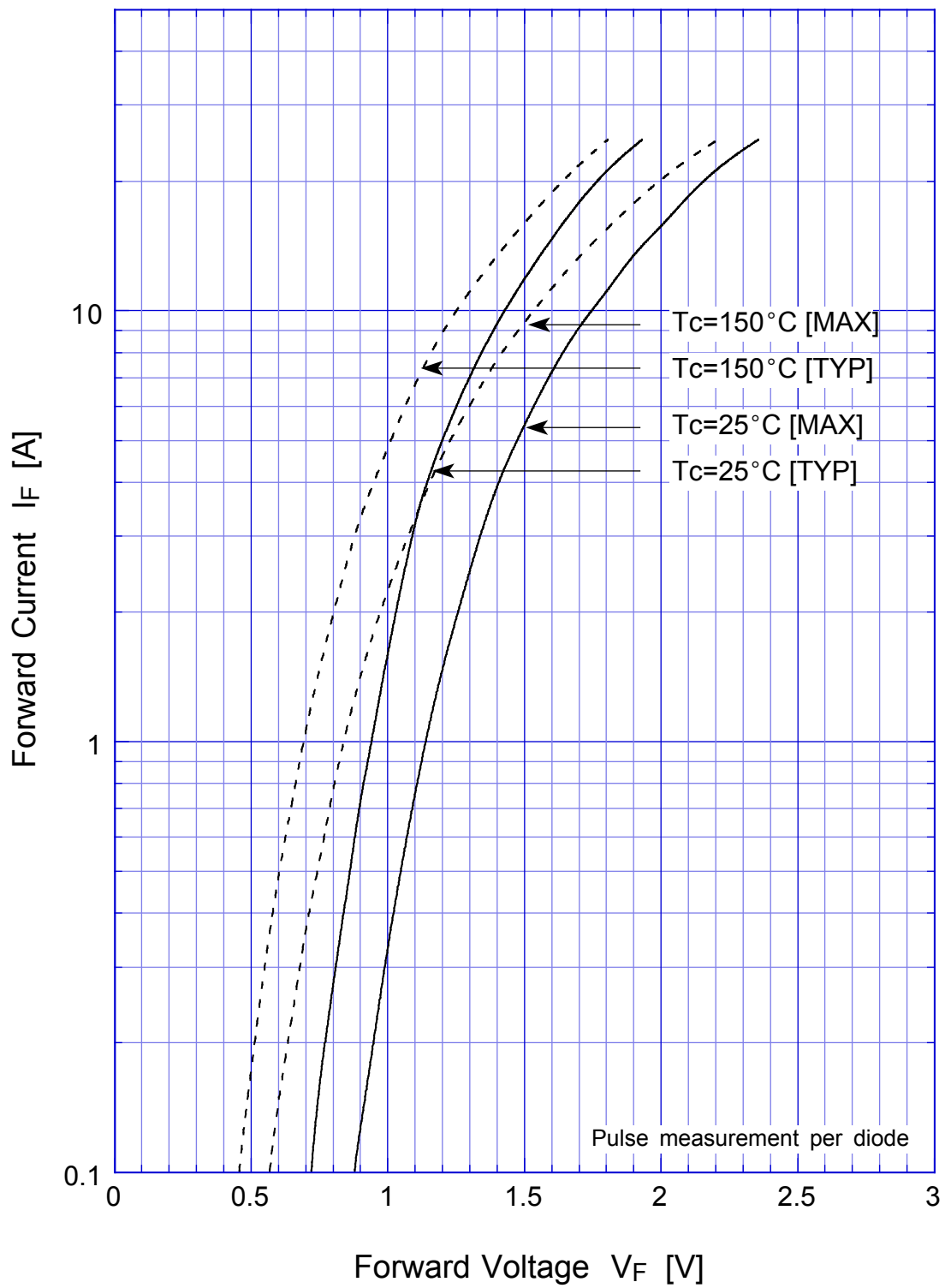
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40~150	$^\circ\text{C}$
Operating Junction Temperature	$T_j$		150	$^\circ\text{C}$
Maximum Reverse Voltage	$V_{RM}$		400	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load, Rating for each diode $I_O/2$ , $T_c=125^\circ\text{C}$	5	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	50	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	$V_F$	$I_F=2.5\text{A}$ , 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	$\mu\text{A}$
Reverse Recovery Time	trr	$I_F=0.5\text{A}$ , $I_R=1\text{A}$ , Rating of per diode	Max.50	ns
Thermal Resistance	$\theta_{jc}$	junction to case	Max.3.3	$^\circ\text{C}/\text{W}$

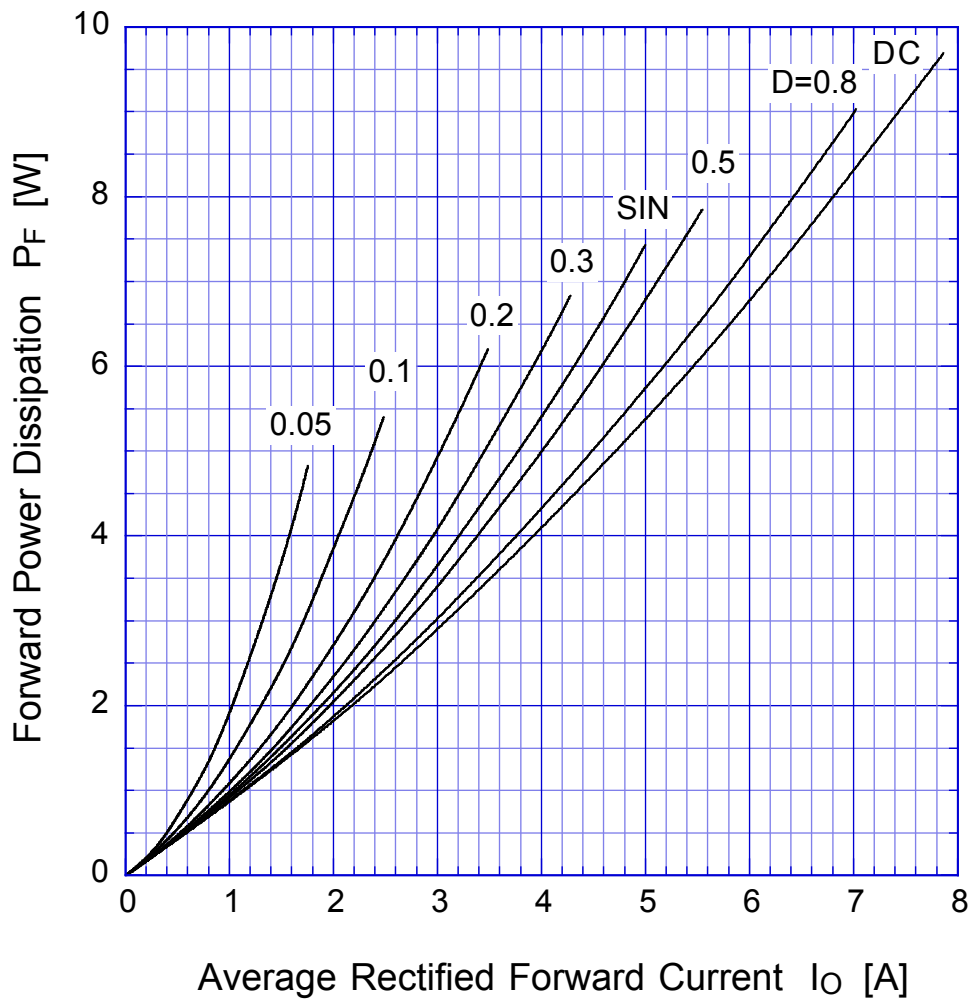
# D5LC40

## Forward Voltage

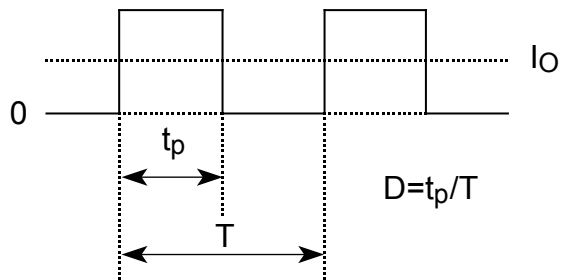


# D5LC40

## Forward Power Dissipation

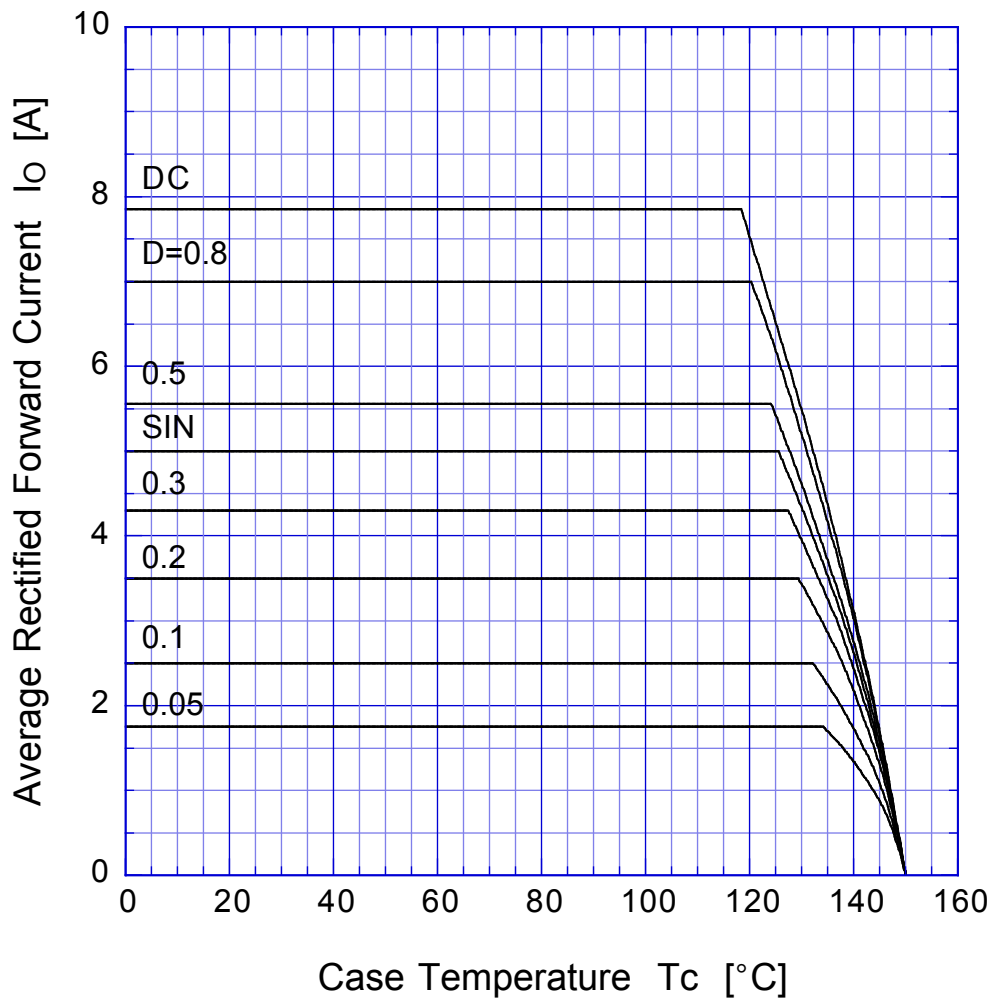


$T_j = 150^\circ\text{C}$



# D5LC40

# Derating Curve

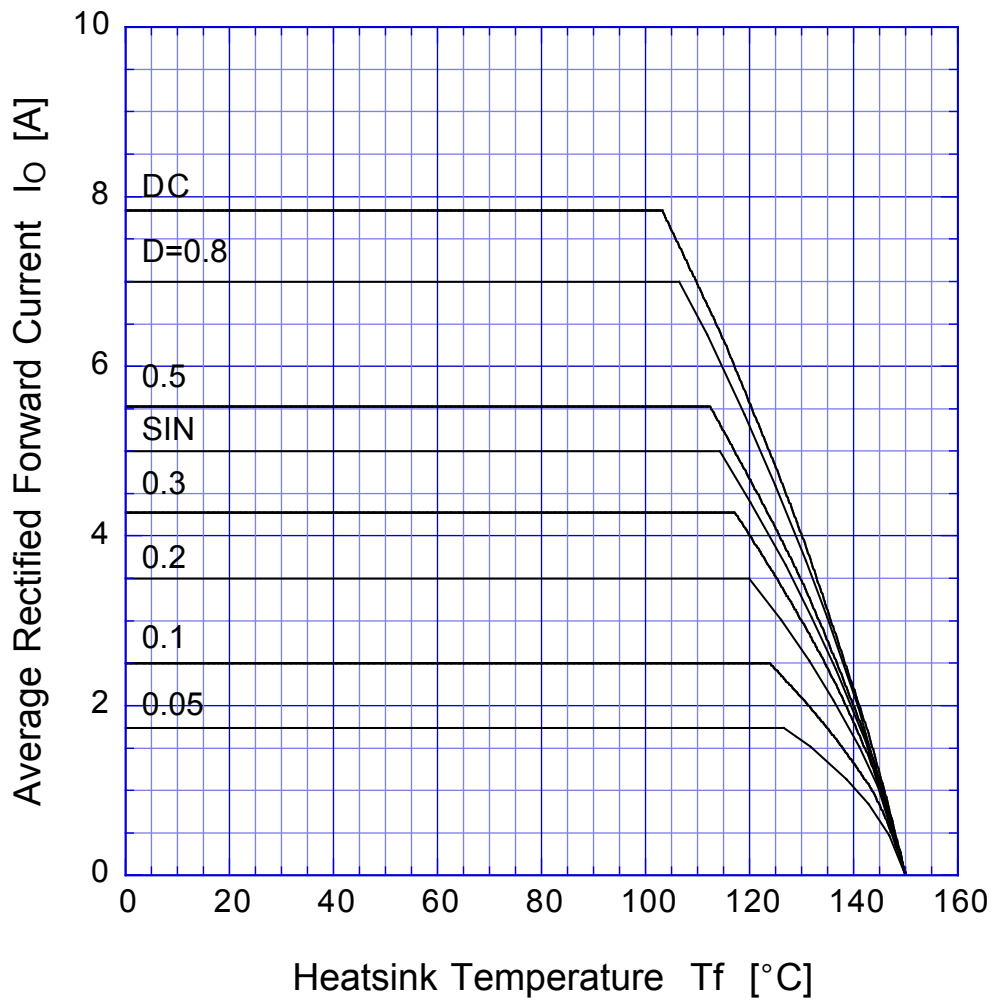


$$V_R = V_{RM}$$



# D5LC40

# Derating Curve

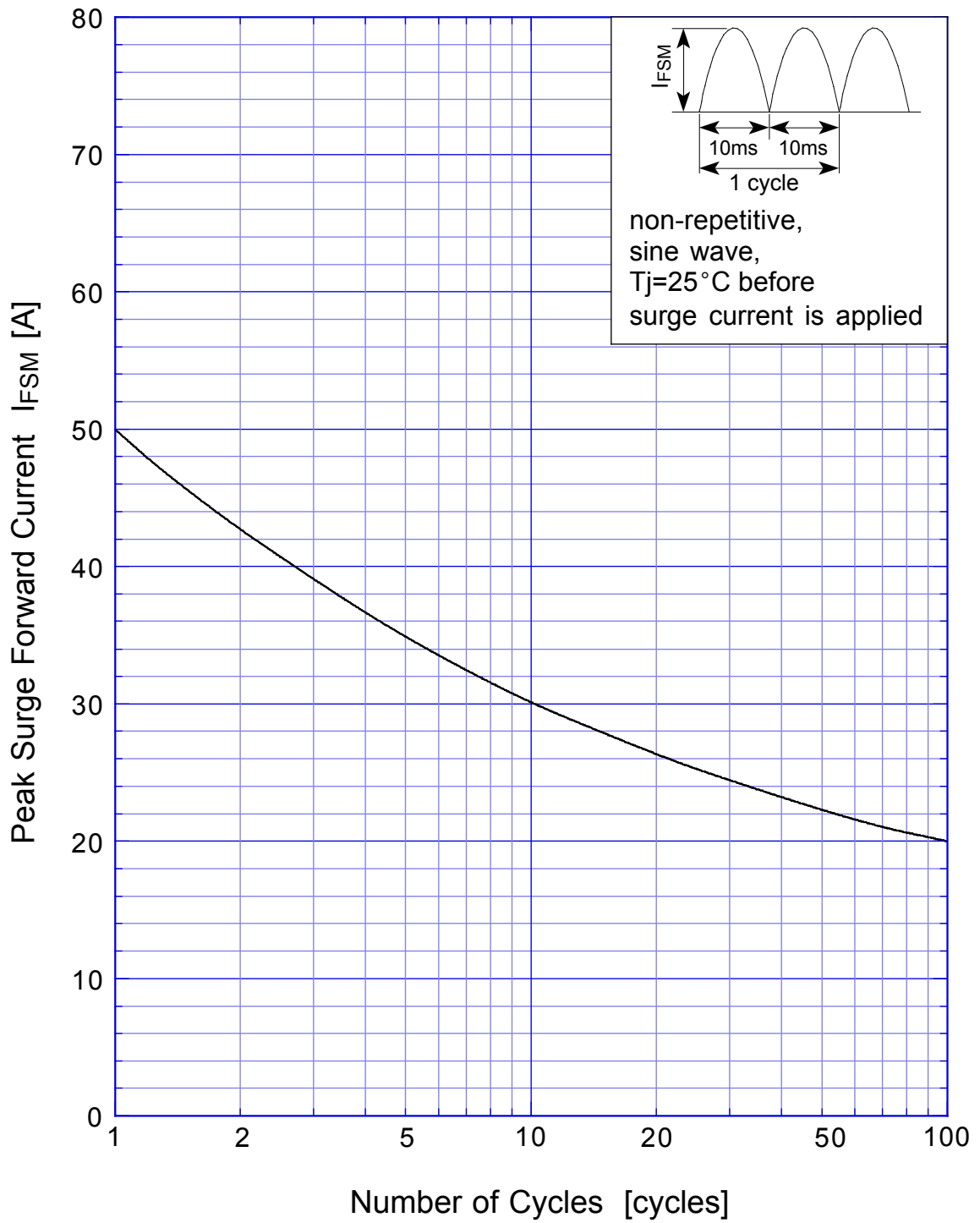


$$V_R = V_{RM}$$



# D5LC40

## Peak Surge Forward Capability



# D5LC40 Junction Capacitance

