

# SHINDENGEN

## Super Fast Recovery Rectifiers

Dual

# S20LC40

## 400V 20A

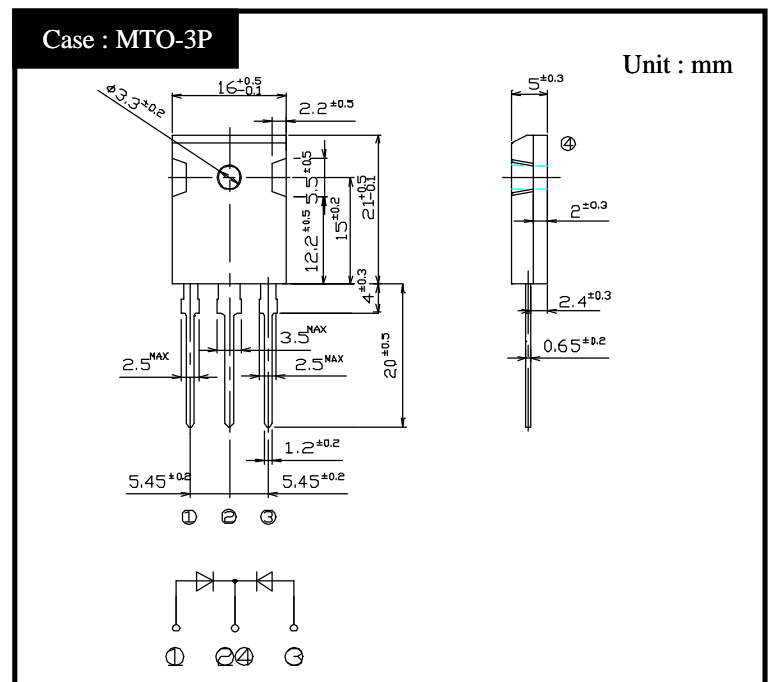
### FEATURES

Low noise  
trr50ns  
Small jc

### APPLICATION

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

### OUTLINE DIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified  $T_c=25$  )

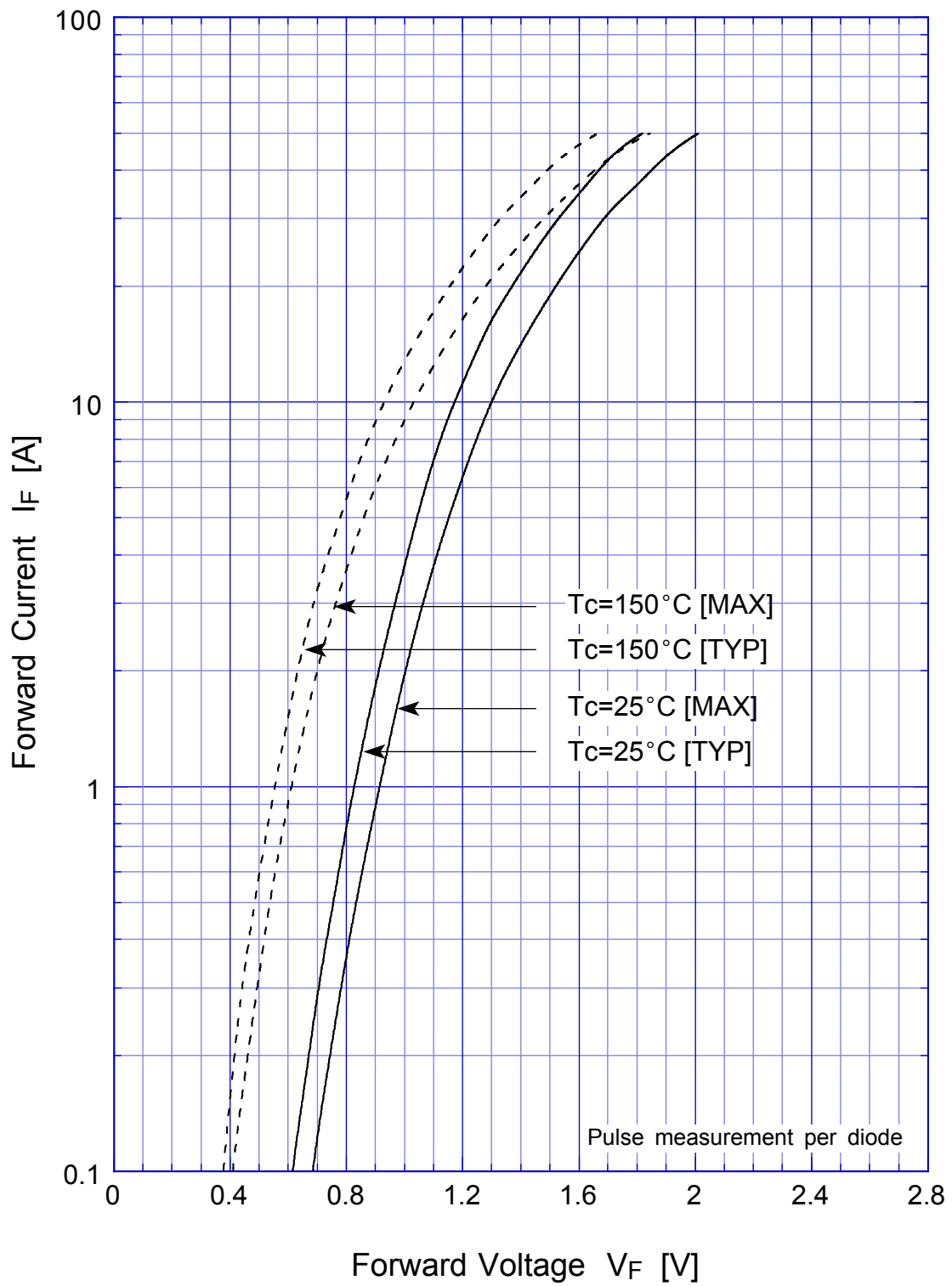
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40 ~ 150	
Operating Junction Temperature	$T_j$		150	
Maximum Reverse Voltage	$V_{RM}$		400	V
Average Rectified Forward Current	$I_o$	50Hz sine wave, R-load, Rating for each diode $I_o/2$ , $T_c=116$	20	A
Peak Surge Forward Current	$I_{FSM}$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

Electrical Characteristics (If not specified  $T_c=25$  )

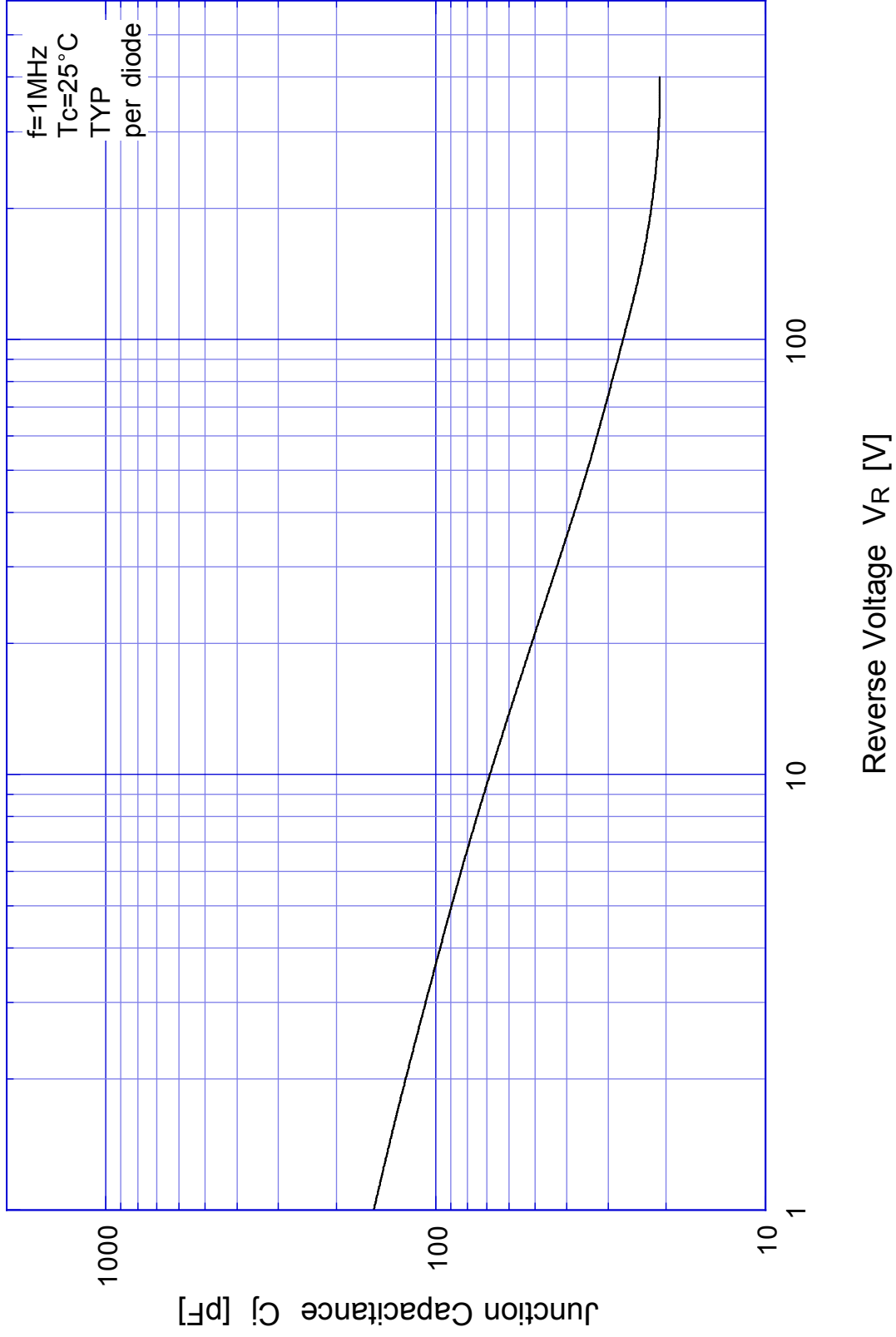
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=10A$ , Pulse measurement, Rating of per diode	Max.1.3	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max.10	$\mu A$
Reverse Recovery Time	trr	$I_F=0.5A$ , $I_R=1A$ , Rating of per diode	Max.50	ns
Thermal Resistance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

# S20LC40

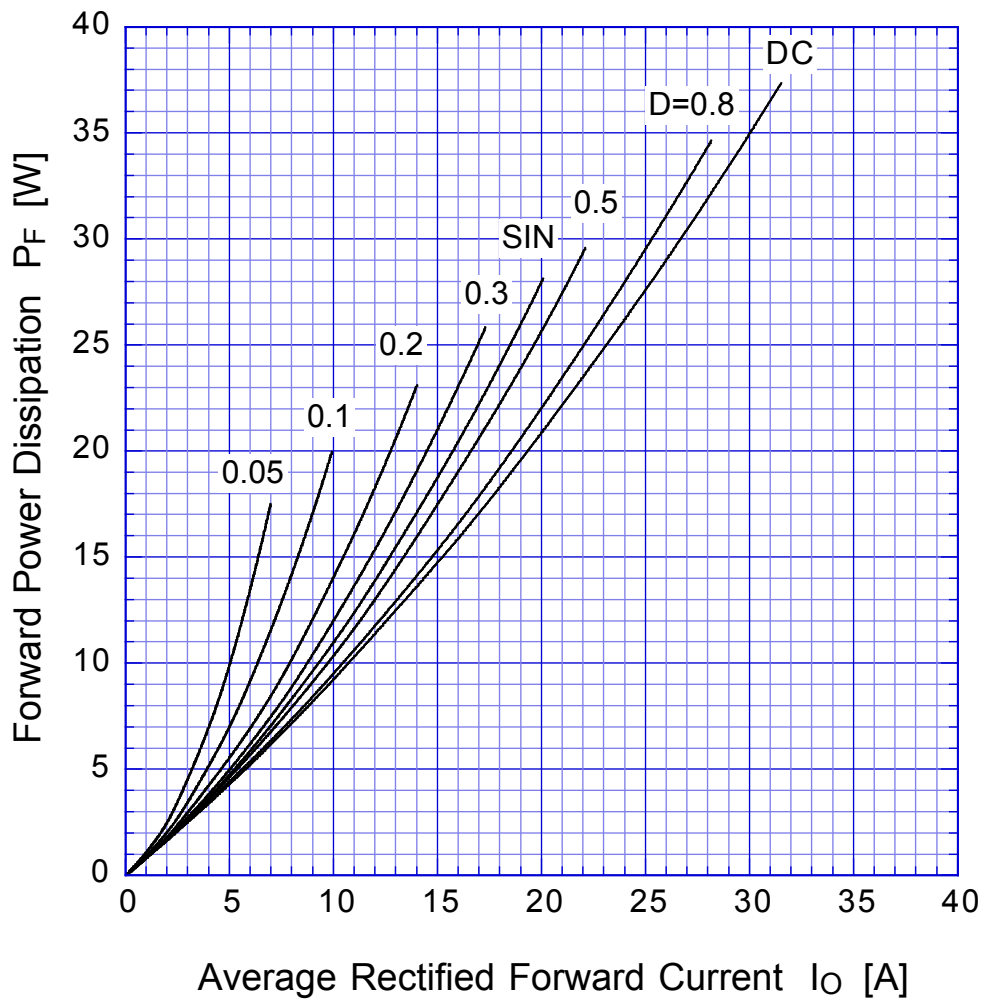
## Forward Voltage



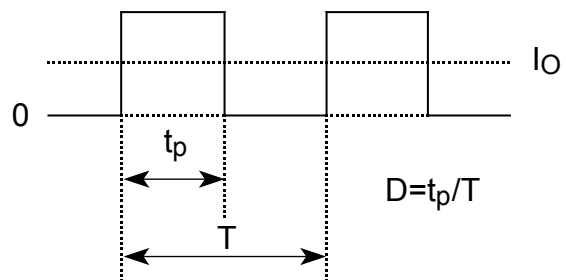
## S20LC40 Junction Capacitance



# S20LC40 Forward Power Dissipation

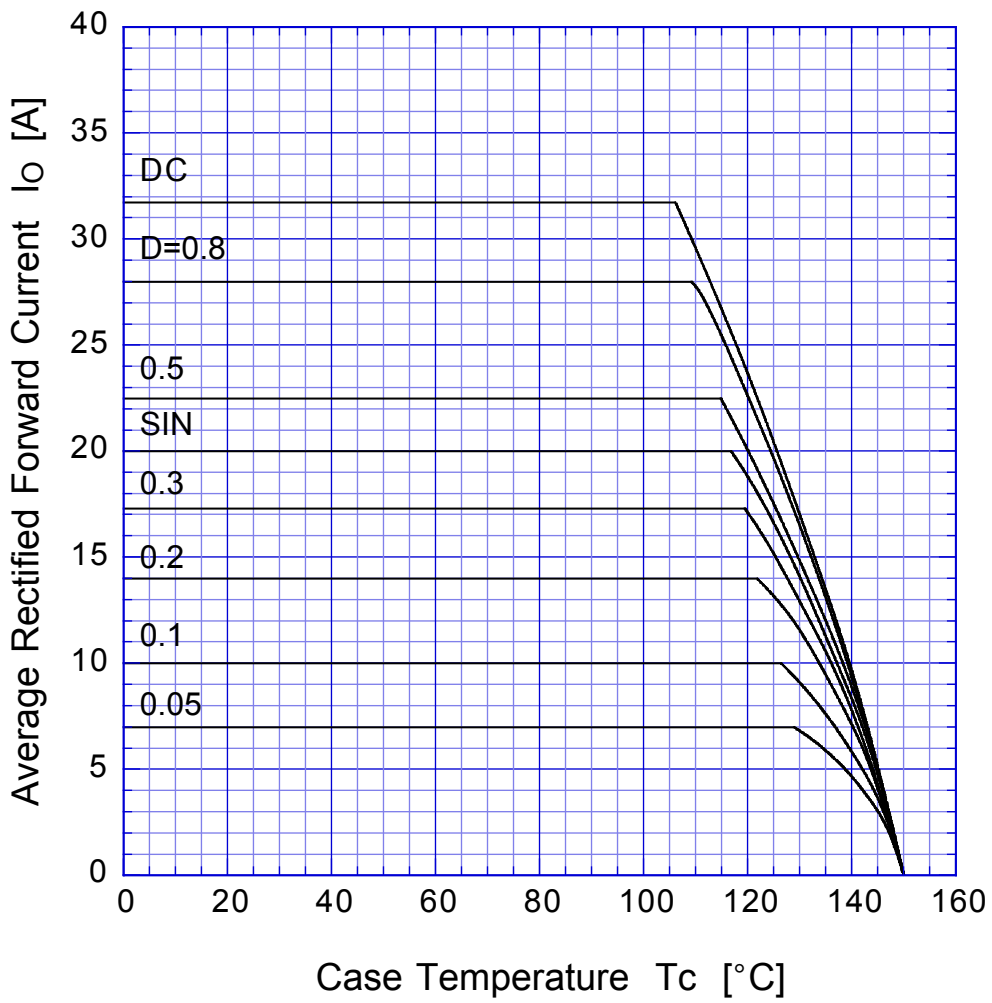


$T_j = T_{jmax}$



# S20LC40

# Derating Curve



$$V_R = V_{RM}$$



# S20LC40

## Peak Surge Forward Capability

