

# SHINDENGEN

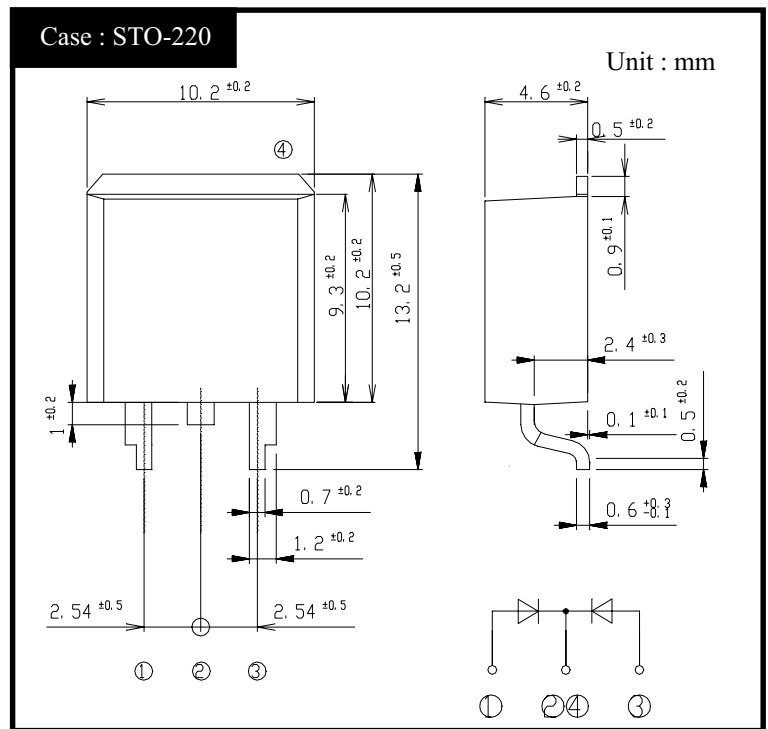
## Super Fast Recovery Rectifiers

Dual

# DF10LC30

## 300V 10A

### OUTLINE DIMENSIONS



### RATINGS

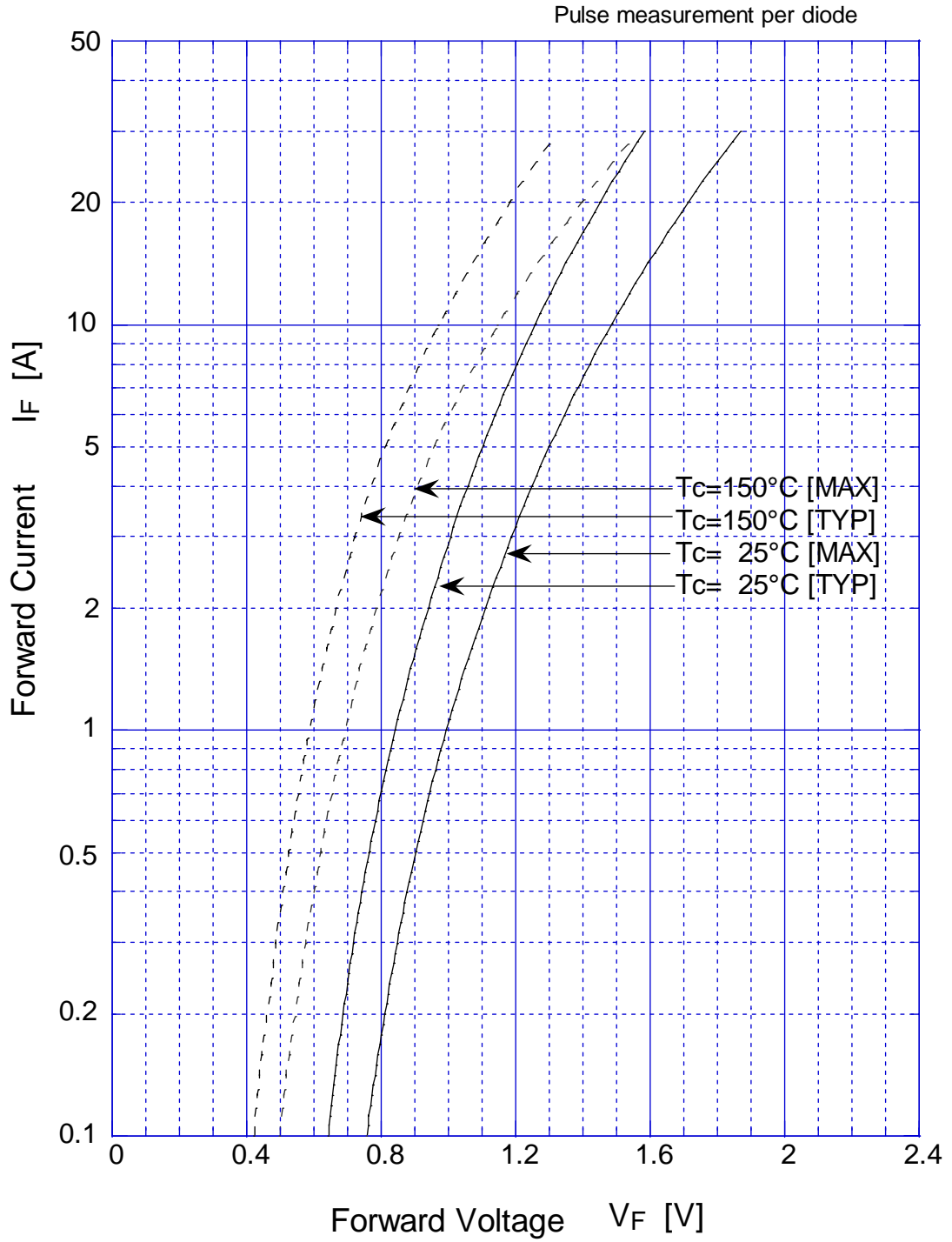
#### ● Absolute Maximum Ratings (Unless otherwise specified, Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-55~150	°C
Operating Junction Temperature	T <sub>j</sub>		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		300	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load, Rating for each diode I <sub>o</sub> /2, Tc=124°C	10	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	80	A

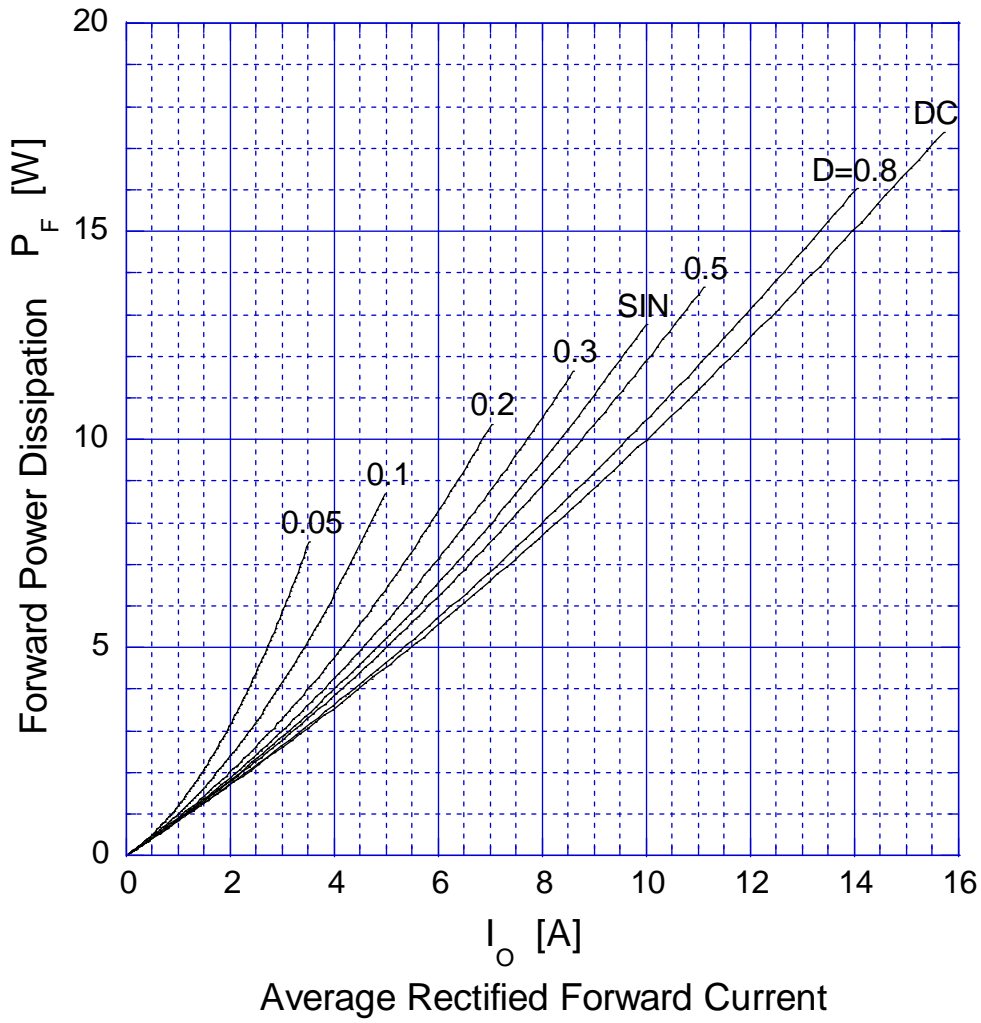
#### ● Electrical Characteristics (Unless otherwise specified, Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =5A, Pulse measurement, Rating of per diode	Max 1.3	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max 25	μA
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, Rating of per diode	Max 30	ns
Junction Capacitance	C <sub>j</sub>	f=1MHz, V <sub>R</sub> =10V, Rating of per diode	TYP 50	pF
Thermal Resistance	θ <sub>jc</sub>	junction to case	Max 2.0	°C/W

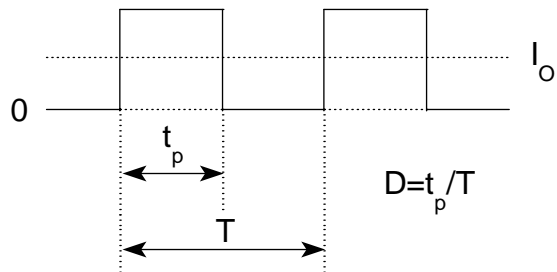
# DF10LC30 Forward Voltage



# DF10LC30 Forward Power Dissipation

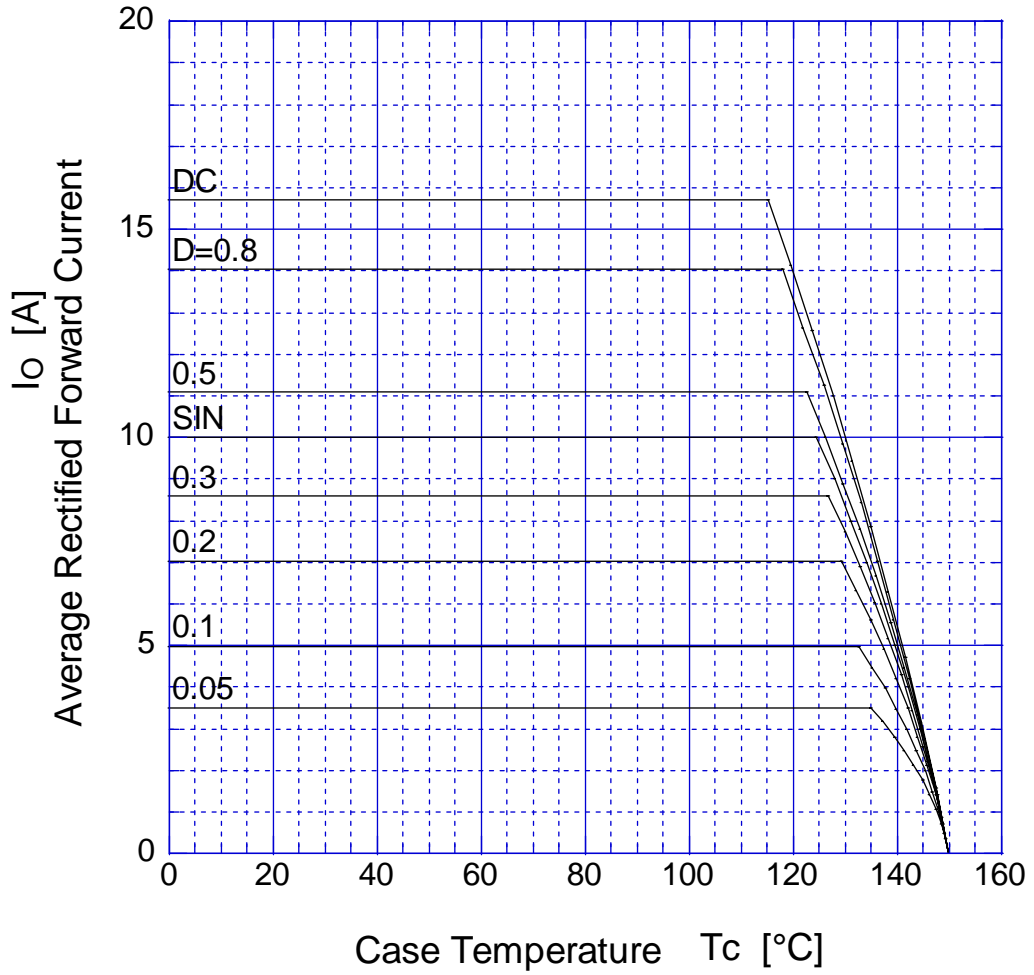


$T_j = 150^\circ\text{C}$

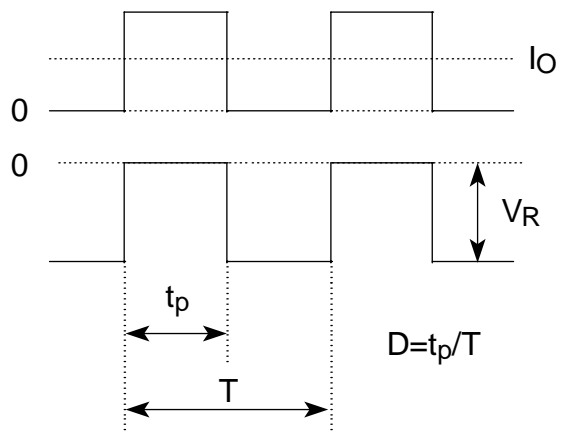


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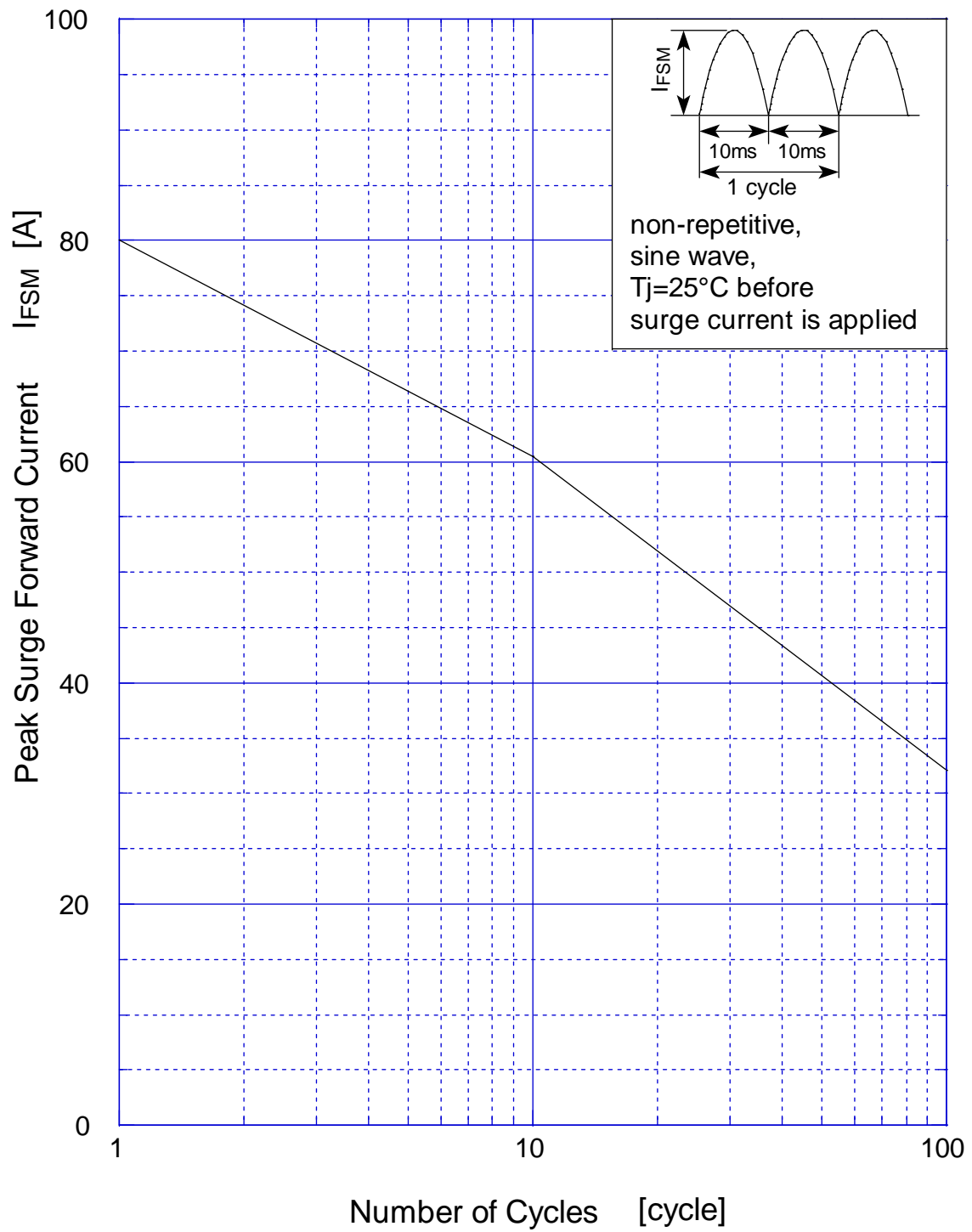
# Derating Curve



$$V_R = V_{RM}$$



# DF10LC30 Peak Surge Forward Capability



# DF10LC30 Junction Capacitance

