

# SHINDENGEN

## Schottky Rectifiers (SBD)

## SBD Bridges

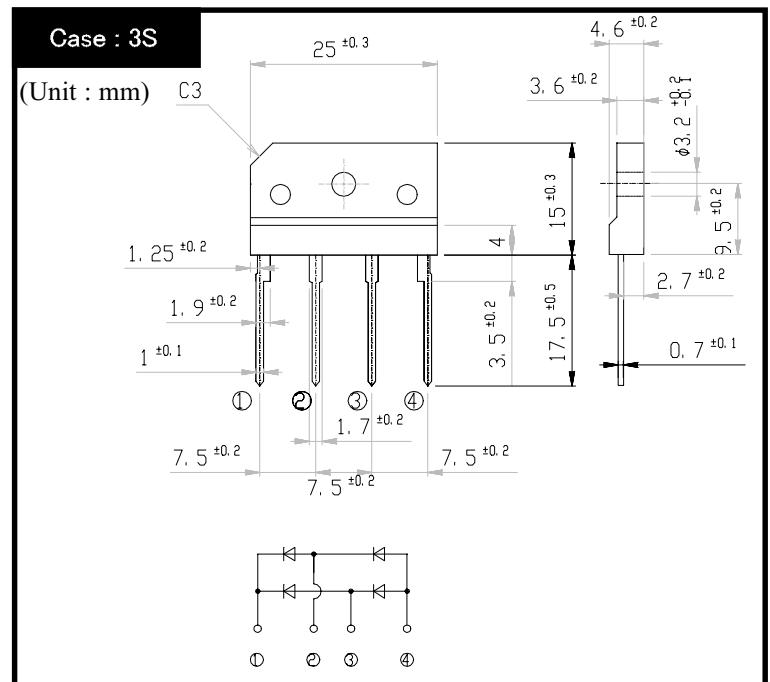
# D15XBS6

## 60V 15A

### FEATURES

- Thin Single In-Line Package
- SBD Bridge
- Low VF

### OUTLINE DIMENSIONS



### RATINGS

#### ● Absolute Maximum Ratings (If not specified Tc=25°C)

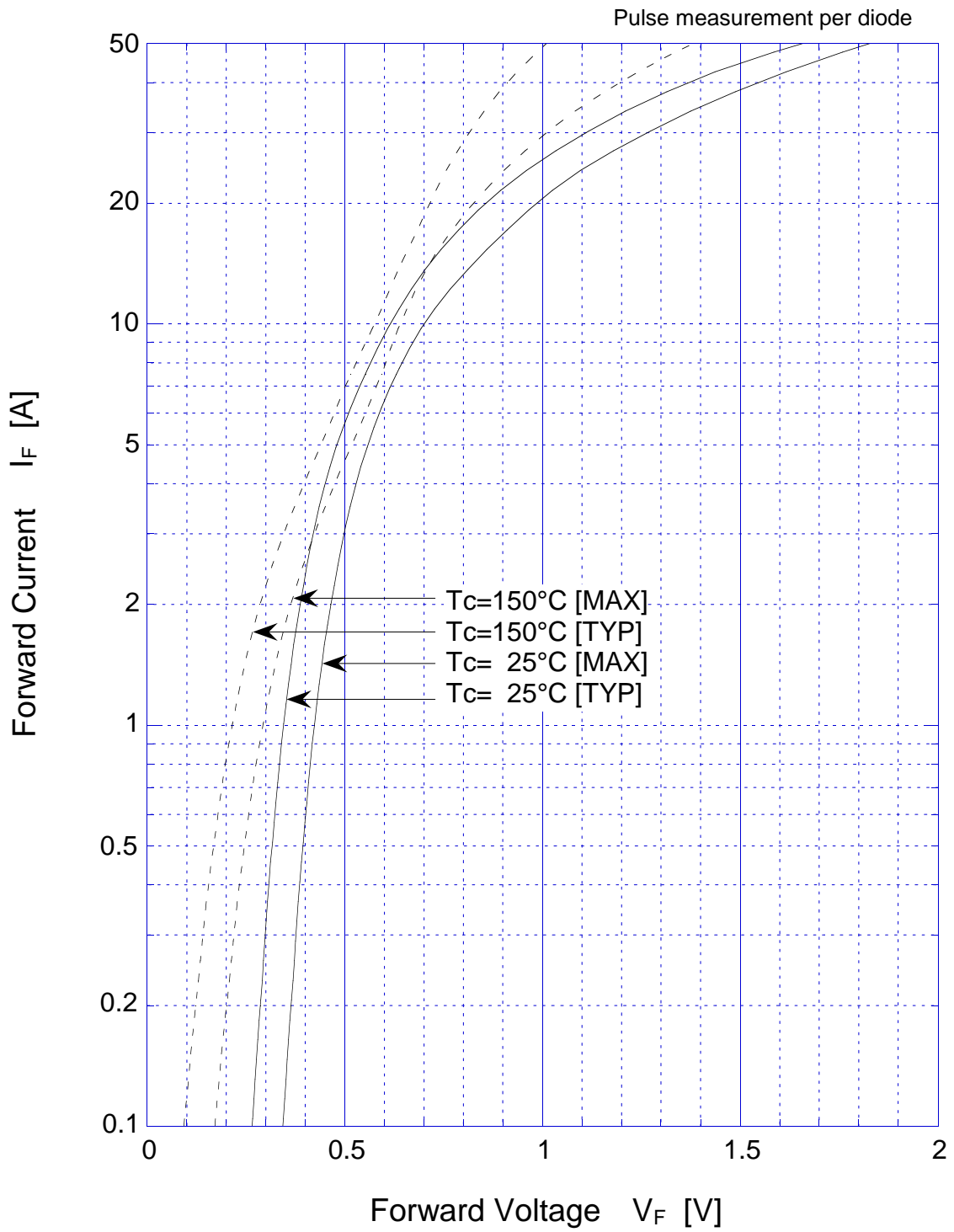
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-55 ~ 150	°C
Operating Junction Temperature	T <sub>j</sub>		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		60	V
Repetitive Peak Surge Reverse Voltage	V <sub>RRSM</sub>	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load With heatsink T <sub>c</sub> =59°C	15	A
		50Hz sine wave, R-load Without heatsink T <sub>a</sub> =25°C	2.1	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1cycle peak value, T <sub>j</sub> =25 °C	150	A
Repetitive Peak Surge Reverse Power	P <sub>RRSM</sub>	Pulse width 10i s, Rating of per diode, T <sub>j</sub> =25°C	330	W
Dielectric Strength	V <sub>dis</sub>	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

#### ● Electrical Characteristics (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =7.5A, Pulse measurement, Rating of per diode	Max.0.63	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =60V, Pulse measurement, Rating of per diode	Max.6	mA
Junction Capacitance	C <sub>j</sub>	f=1MHz, V <sub>R</sub> =10V, Rating of per diode	TYP 410	pF
Thermal Resistance	θ <sub>jc</sub>	junction to case With heatsink	Max.3.5	°C/W
	θ <sub>jl</sub>	junction to lead	Max.6	
	θ <sub>ja</sub>	junction to ambient	Max.30	

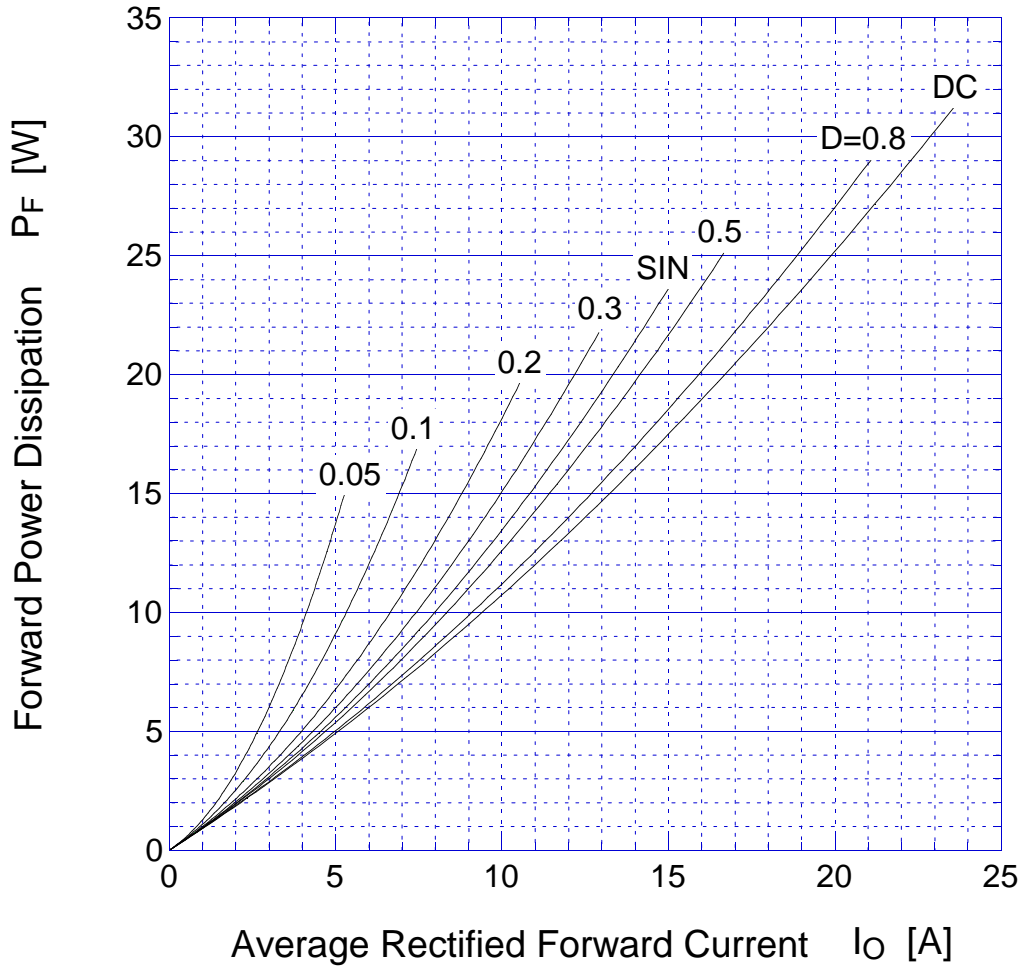
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# Forward Voltage

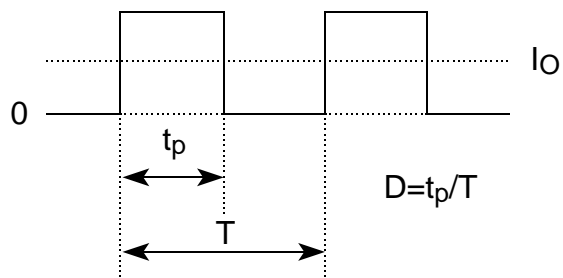


# D15XBS6

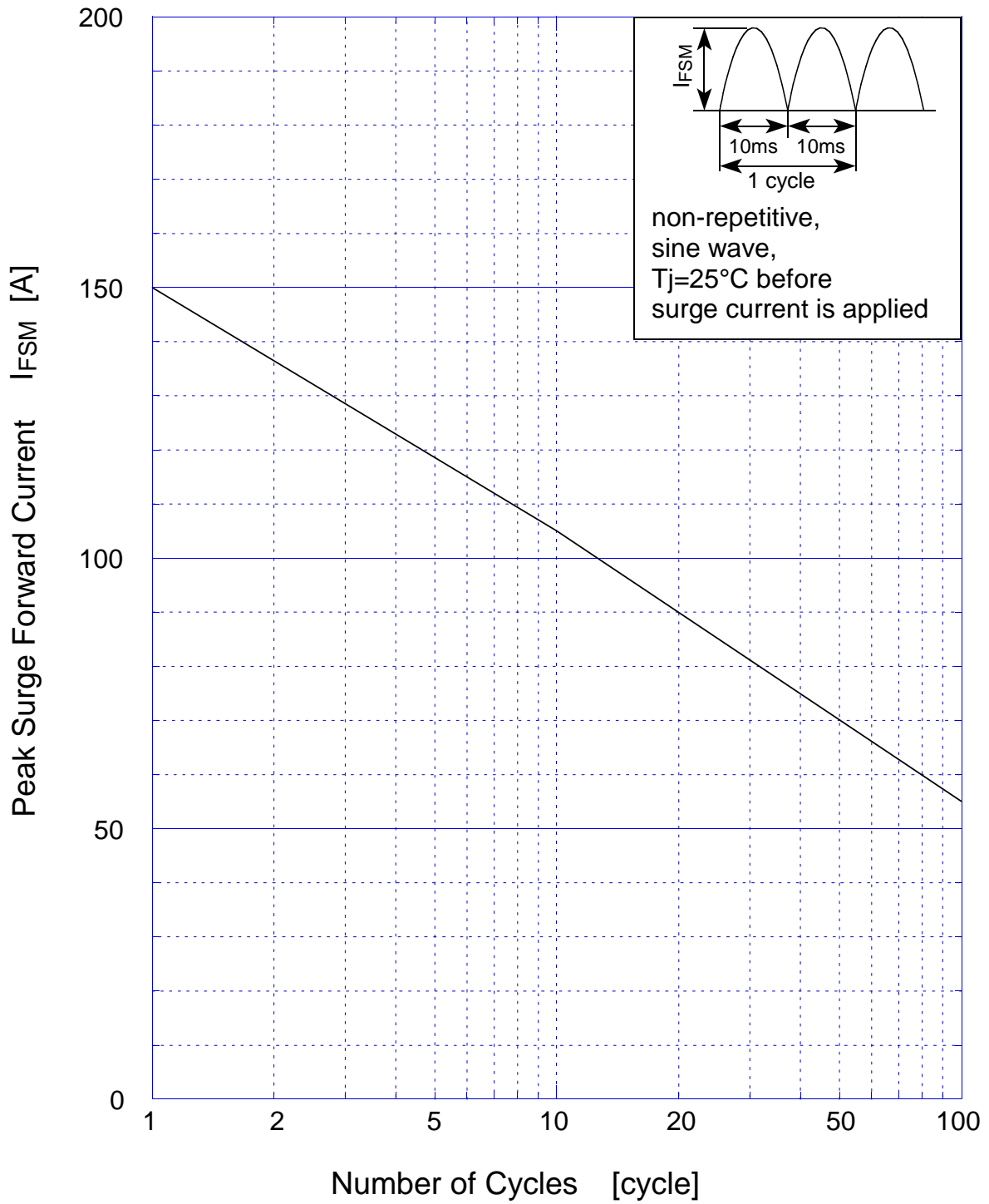
# Forward Power Dissipation



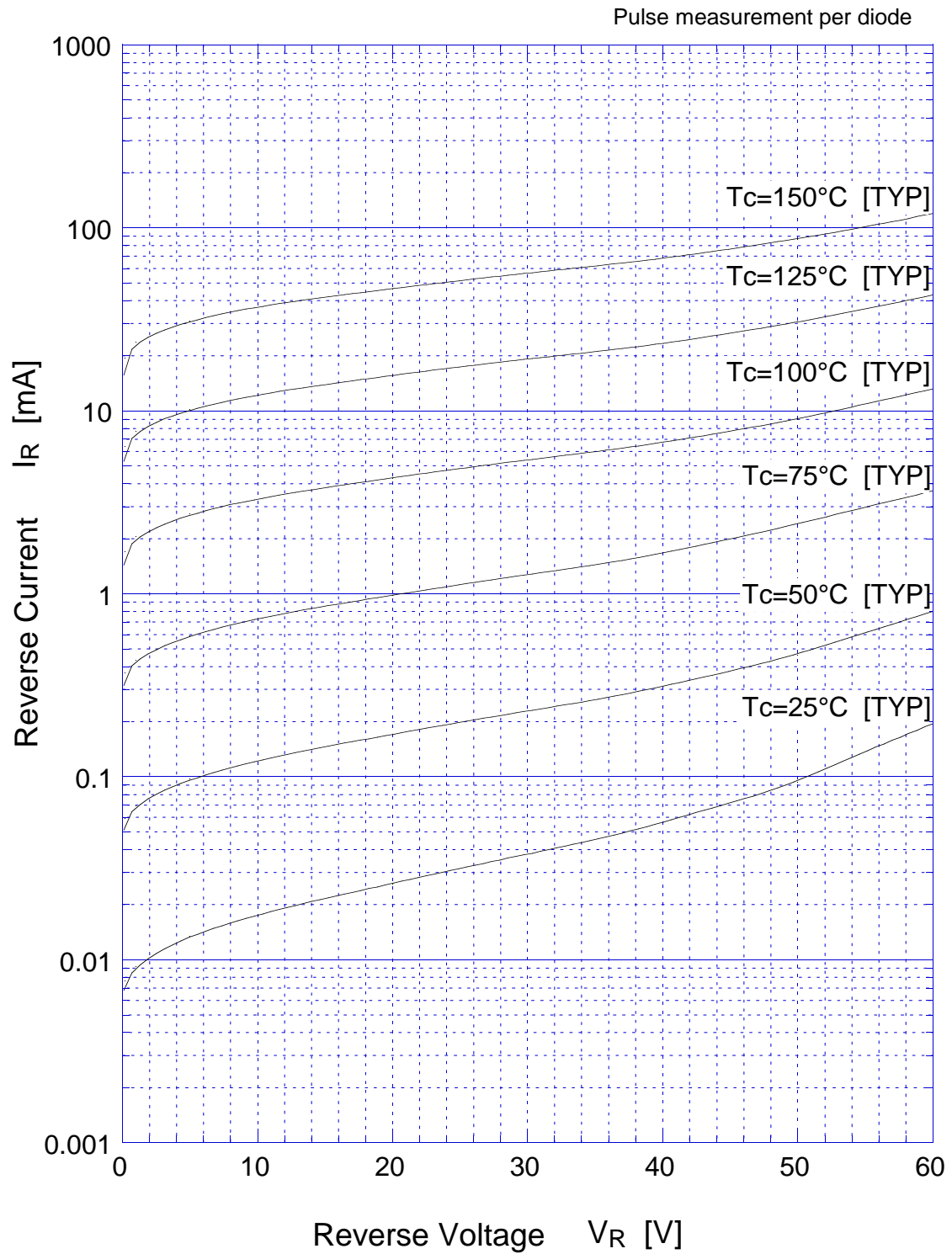
$T_j = 150^\circ\text{C}$



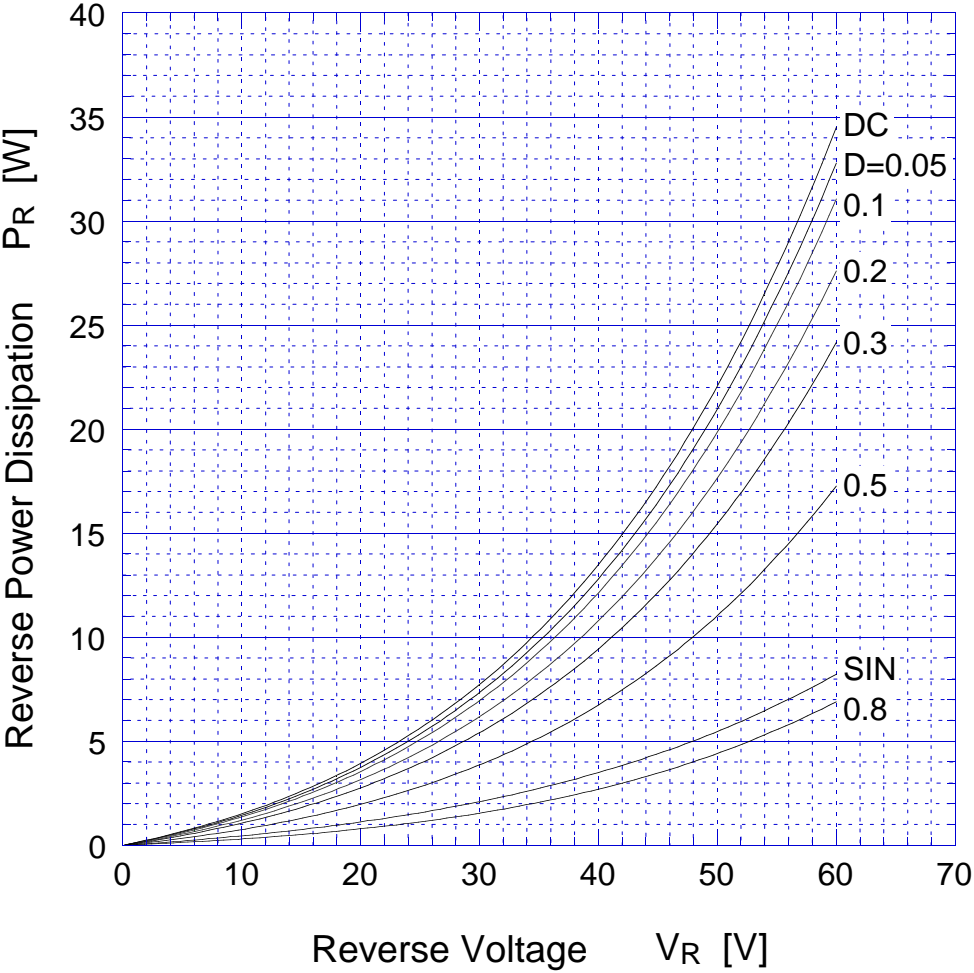
# D15XBS6 Peak Surge Forward Capability



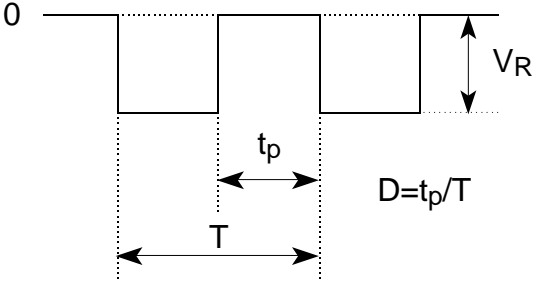
# D15XBS6 Reverse Current



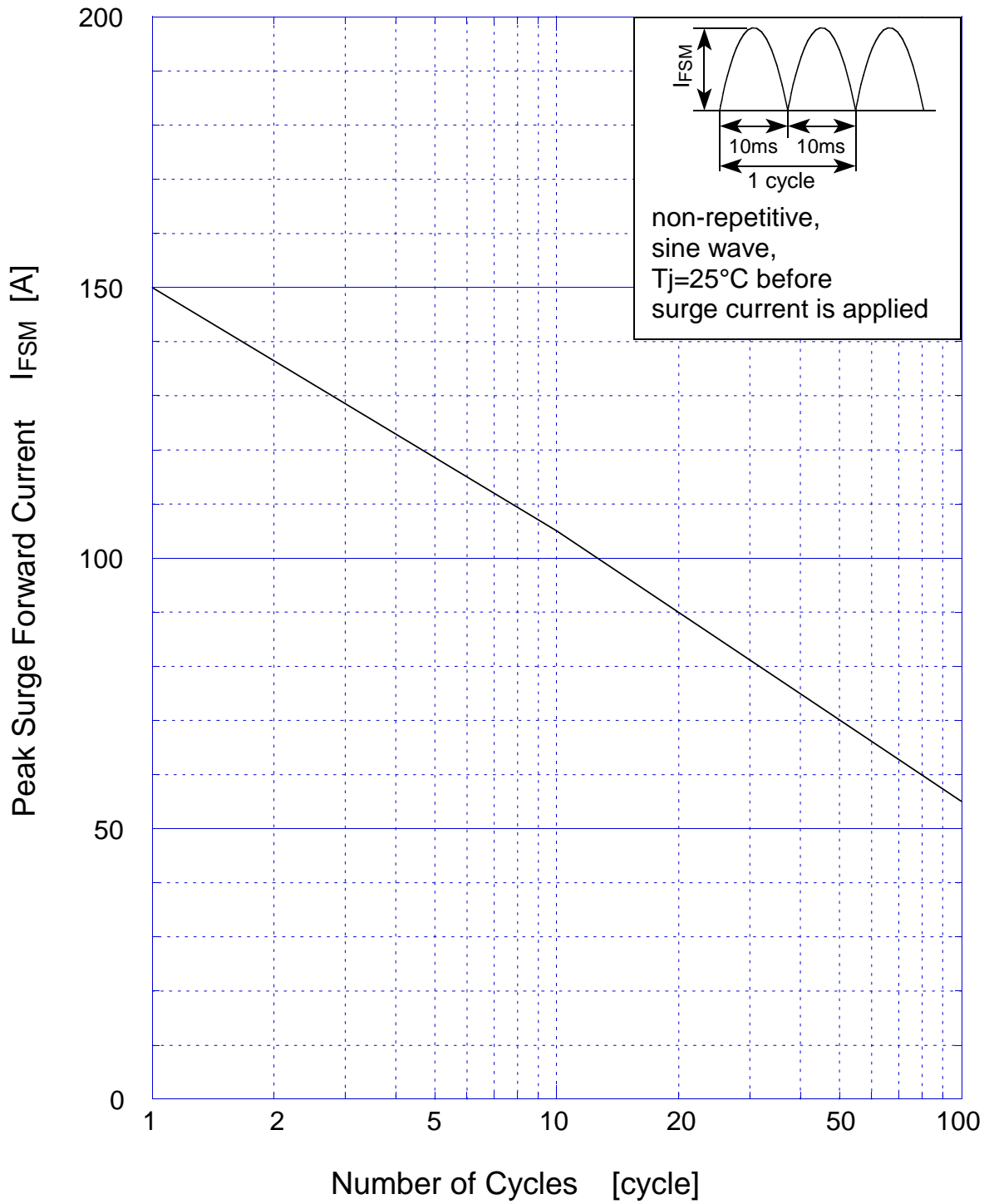
# D15XBS6 Reverse Power Dissipation



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

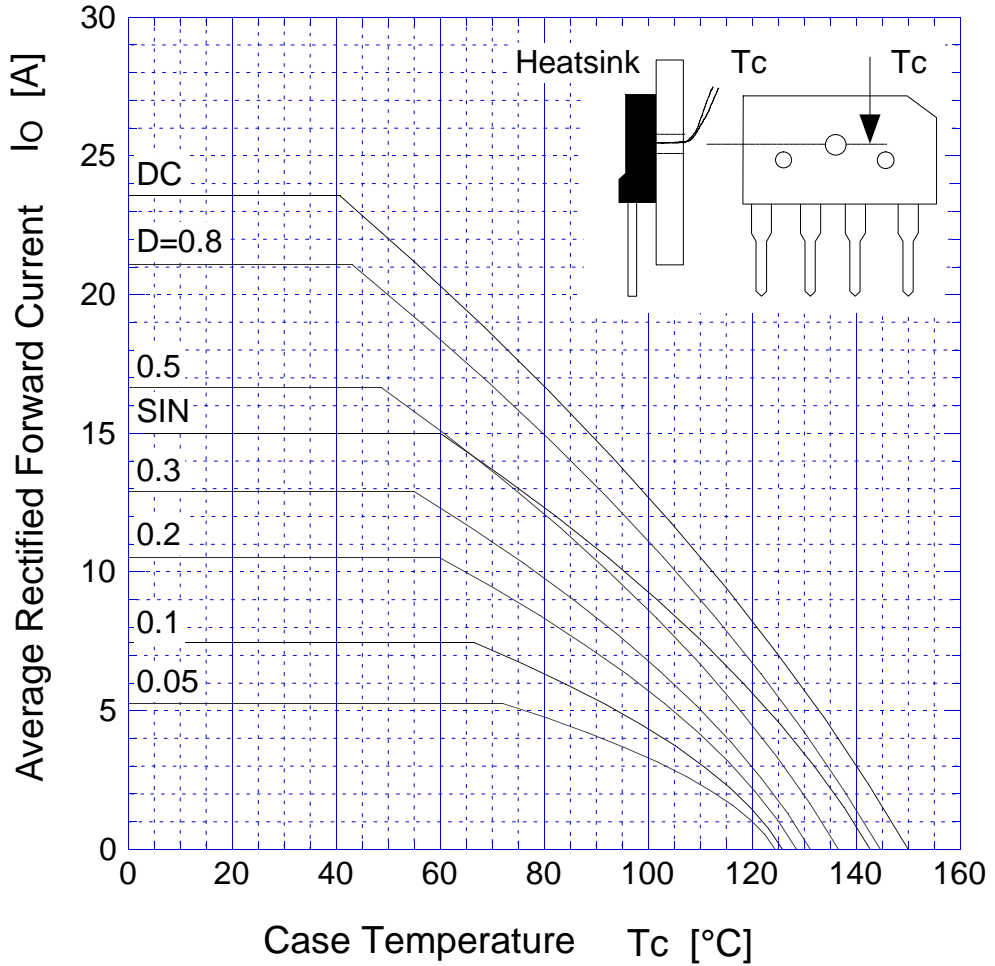


# D15XBS6 Peak Surge Forward Capability

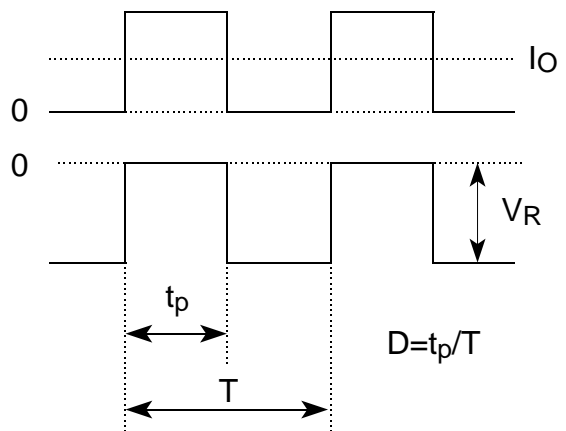


# D15XBS6

# Derating Curve

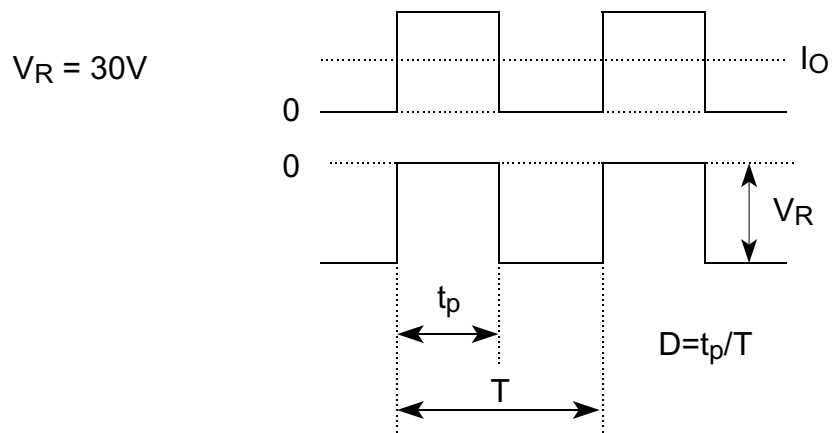
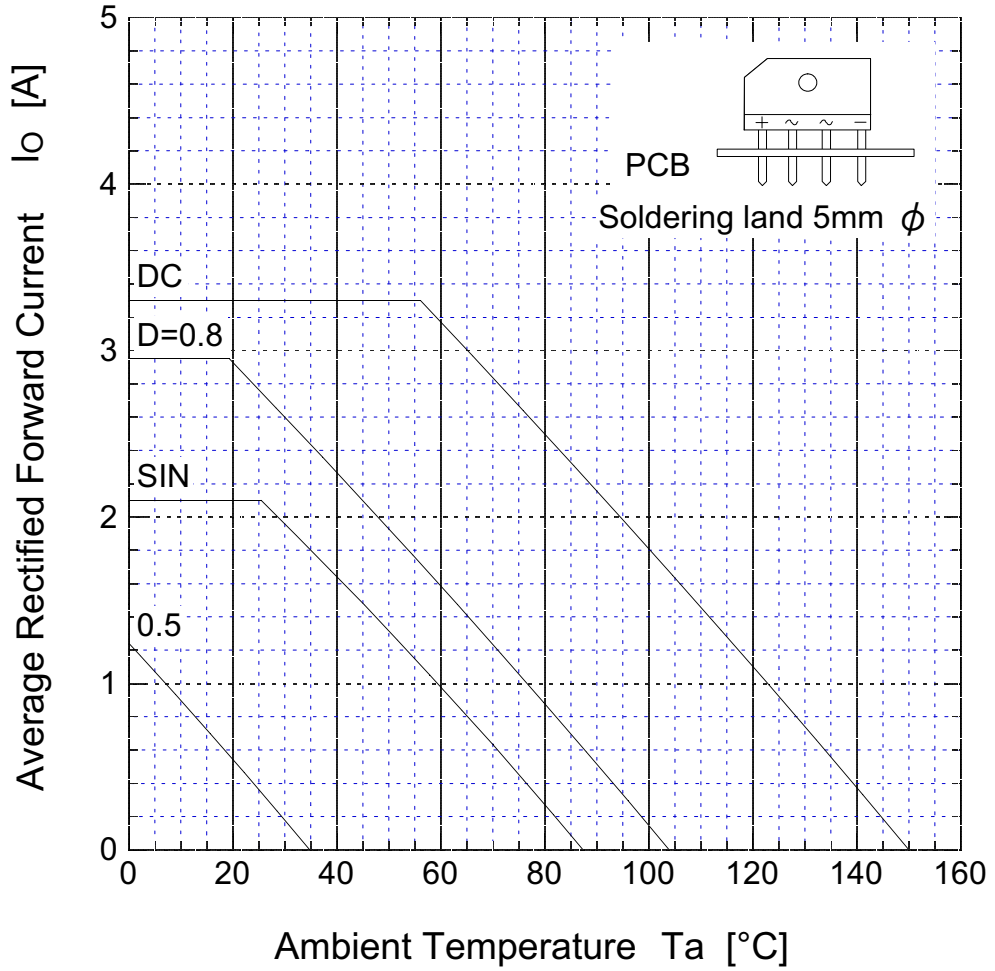


$V_R = 30V$

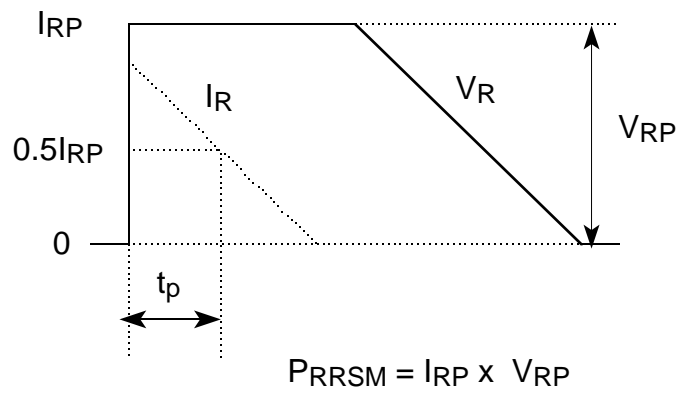
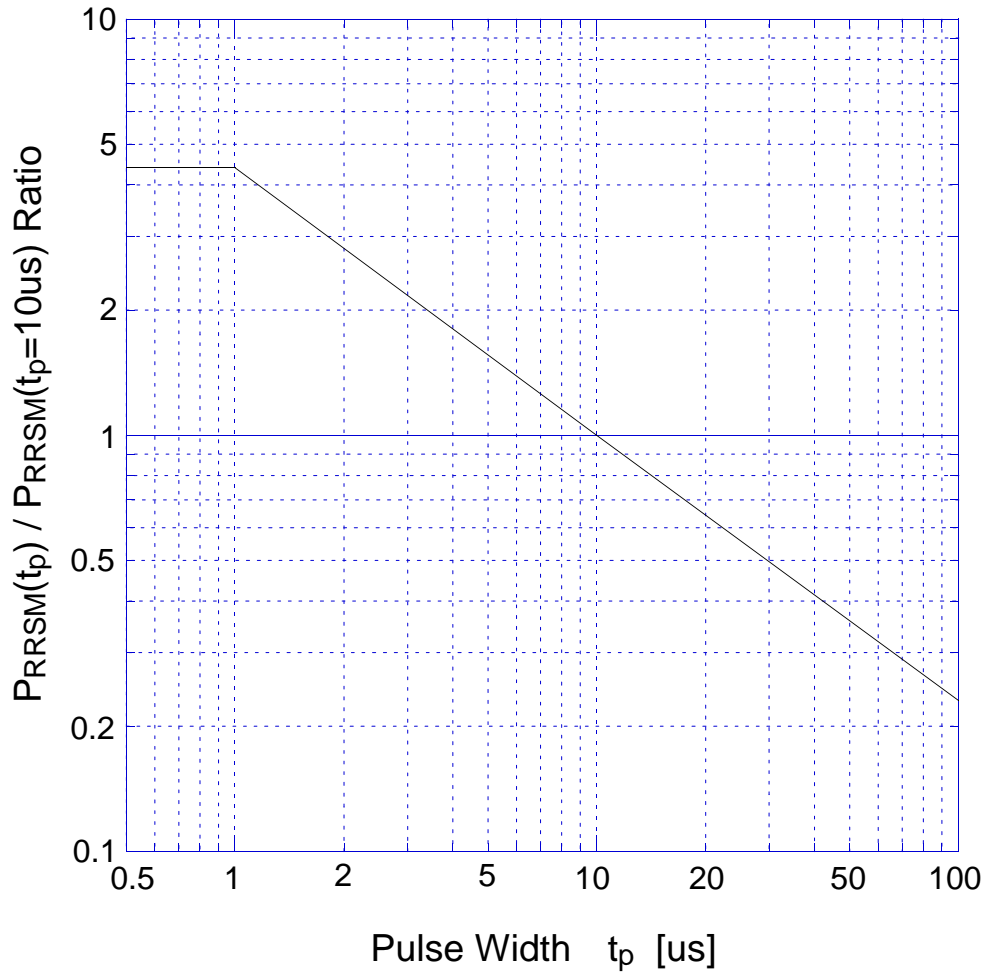


# D15XBS6

# Derating Curve



# D15XBS6 Repetitive Surge Reverse Power Capability



# D15XBS6 Repetitive Surge Reverse Power Derating Curve

