

# SHINDENGEN

## Schottky Rectifiers (SBD)

Single

# D1NS6

## 60V 1A

### FEATURES

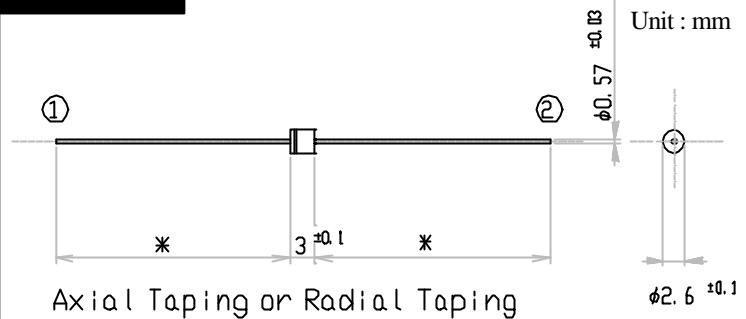
- Tj150
- P<sub>RRSM</sub> avalanche guaranteed
- 5 mm pitch mounting applicable

### APPLICATION

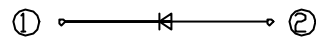
- Switching power supply
- DC/DC converter
- Home Appliances, Office Equipment
- Telecommunication

### OUTLINE DIMENSIONS

Case : AX057



Axial Taping or Radial Taping



- \*Taping Code No.4000:20<sup>MIN</sup>
- No.4060:27<sup>MIN</sup>
- No.4070:15<sup>MIN</sup>

### RATINGS

Absolute Maximum Ratings (If not specified Tl=25 )

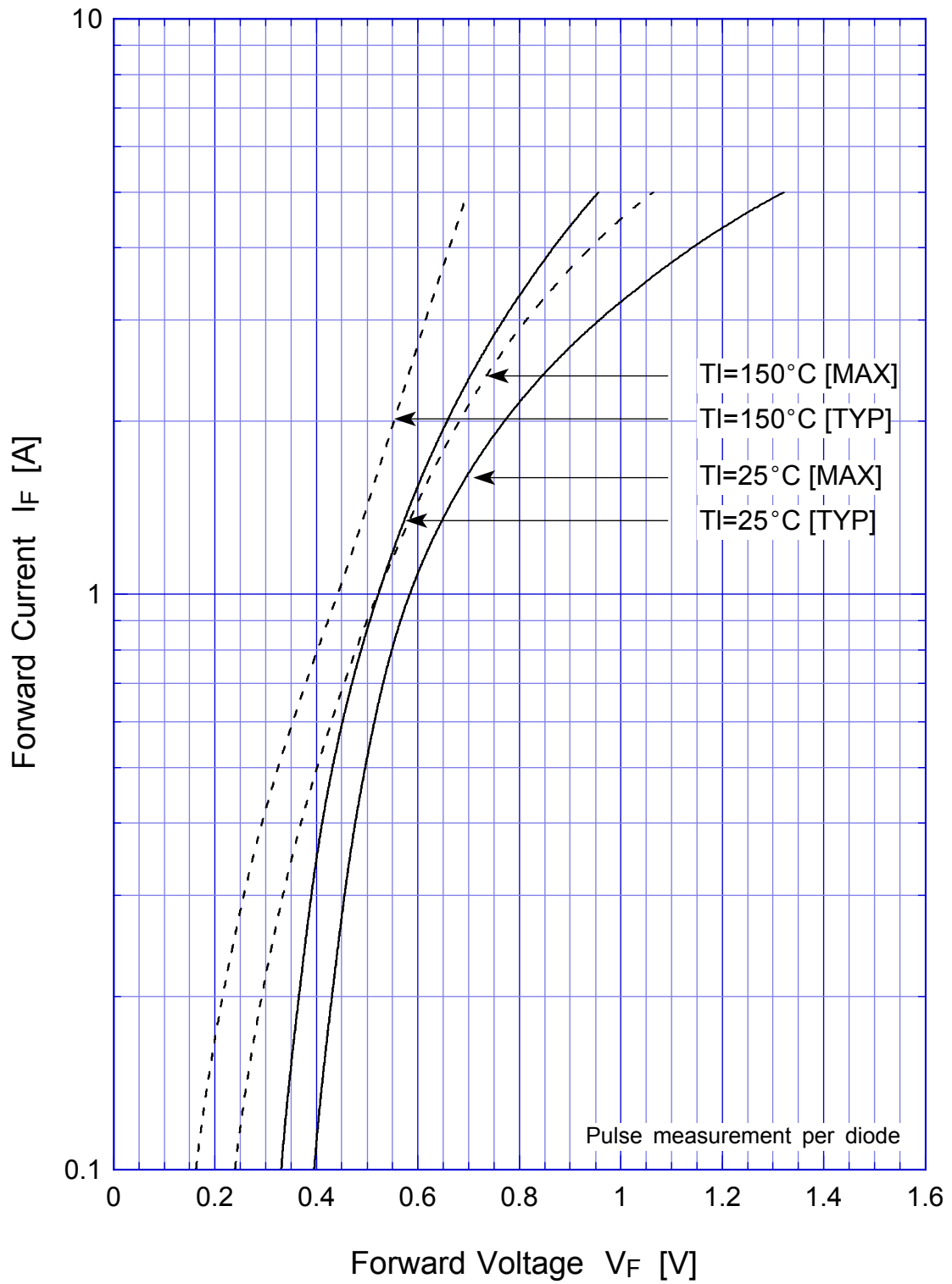
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-55 ~ 150	
Operating Junction Temperature	T <sub>j</sub>		150	
Maximum Reverse Voltage	V <sub>RM</sub>		60	V
Repetitive Peak Surge Reverse Voltage	V <sub>RRSM</sub>	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	I <sub>o</sub>	50Hz sine wave, T <sub>a</sub> =46	1	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =25	30	A
Repetitive Peak Surge Reverse Power	P <sub>RRSM</sub>	Pulse width 10 μs, T <sub>j</sub> =25	60	W

Electrical Characteristics (If not specified Tl=25 )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1A, Pulse measurement	Max.0.58	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement	Max.1	mA
Junction Capacitance	C <sub>j</sub>	f=1MHz, V <sub>R</sub> =10V	Typ.53	pF
Thermal Resistance	j-l	junction to lead	Max.10	/W
	ja	junction to ambient	Max.113	

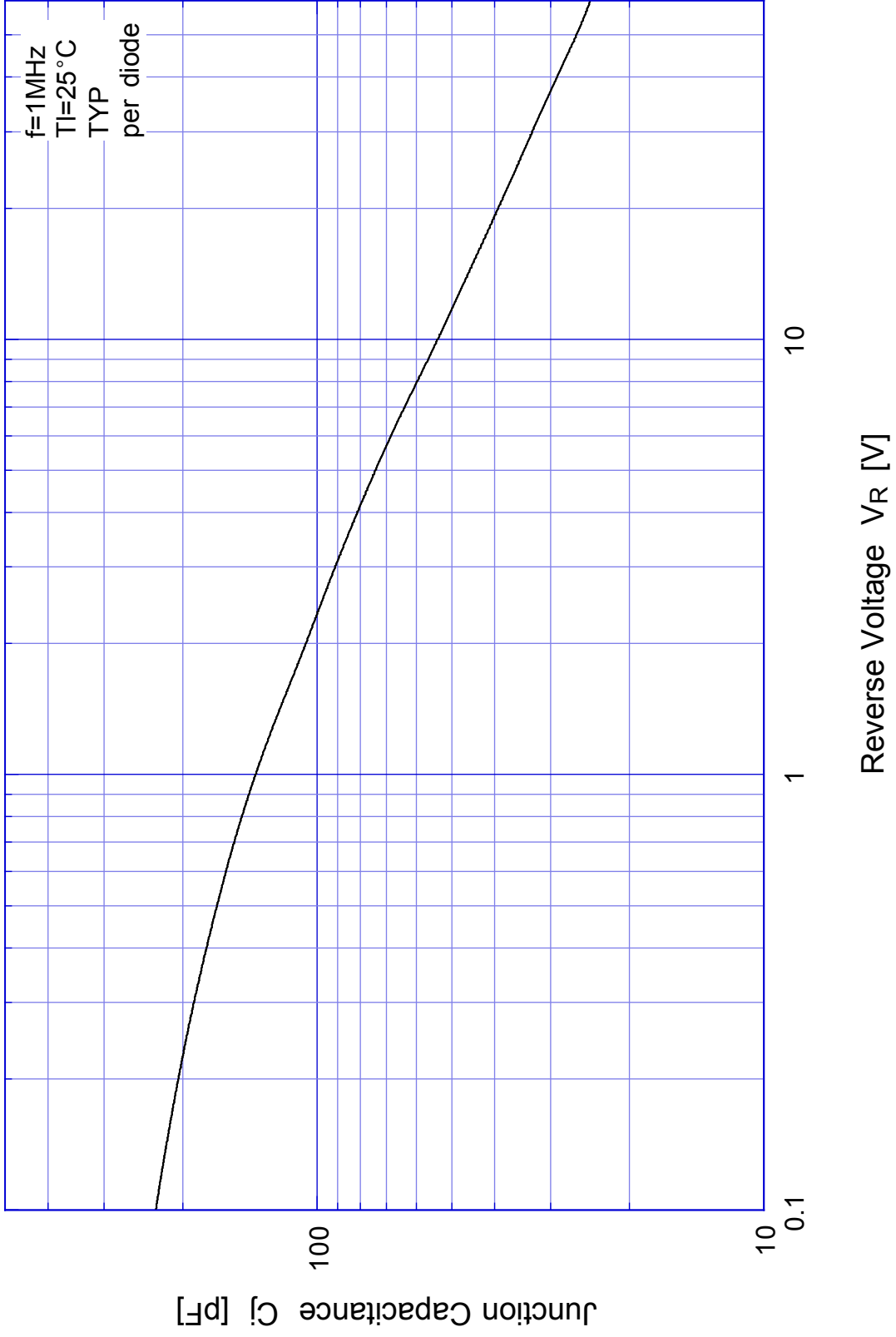
# D1NS6

## Forward Voltage



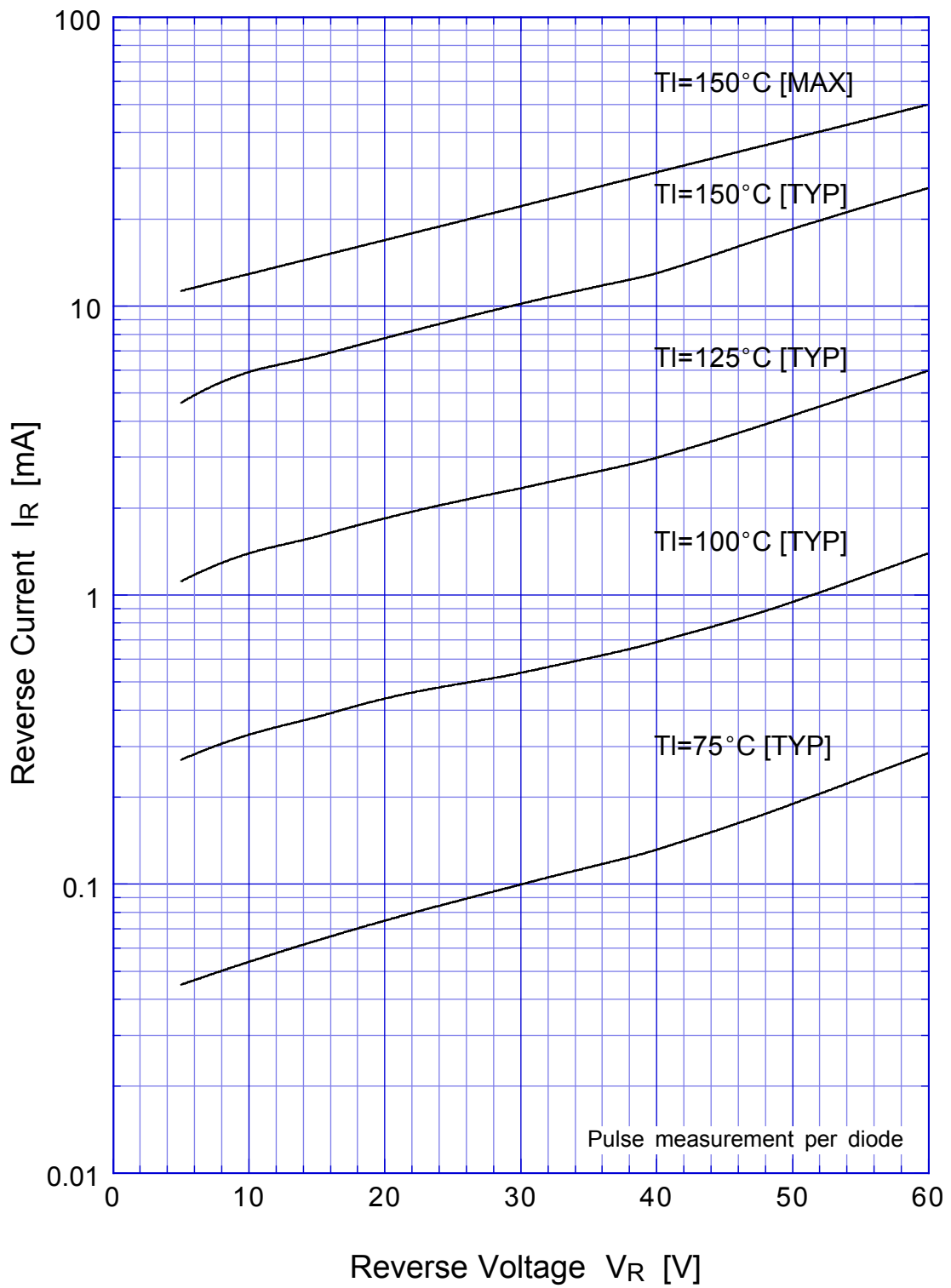
# D1NS6

## Junction Capacitance



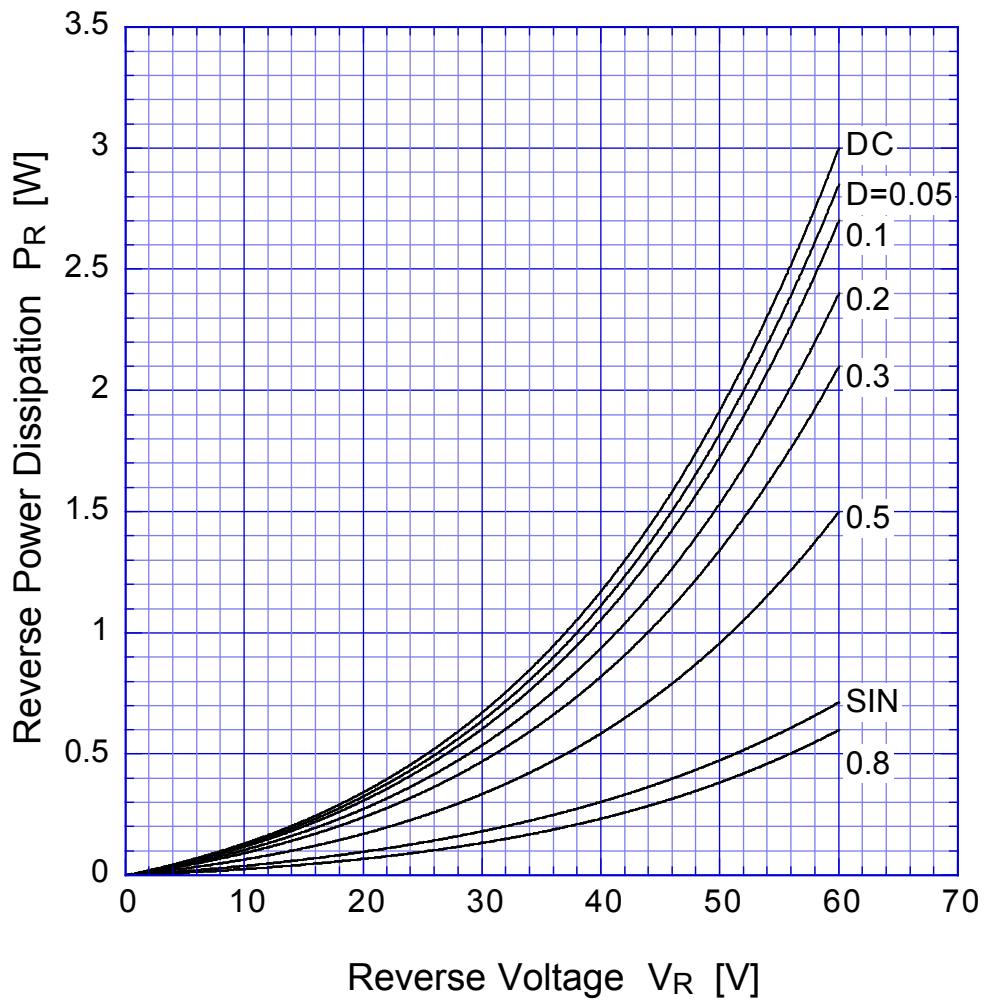
# D1NS6

## Reverse Current

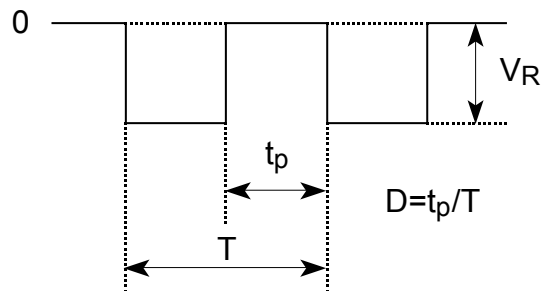


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## Reverse Power Dissipation

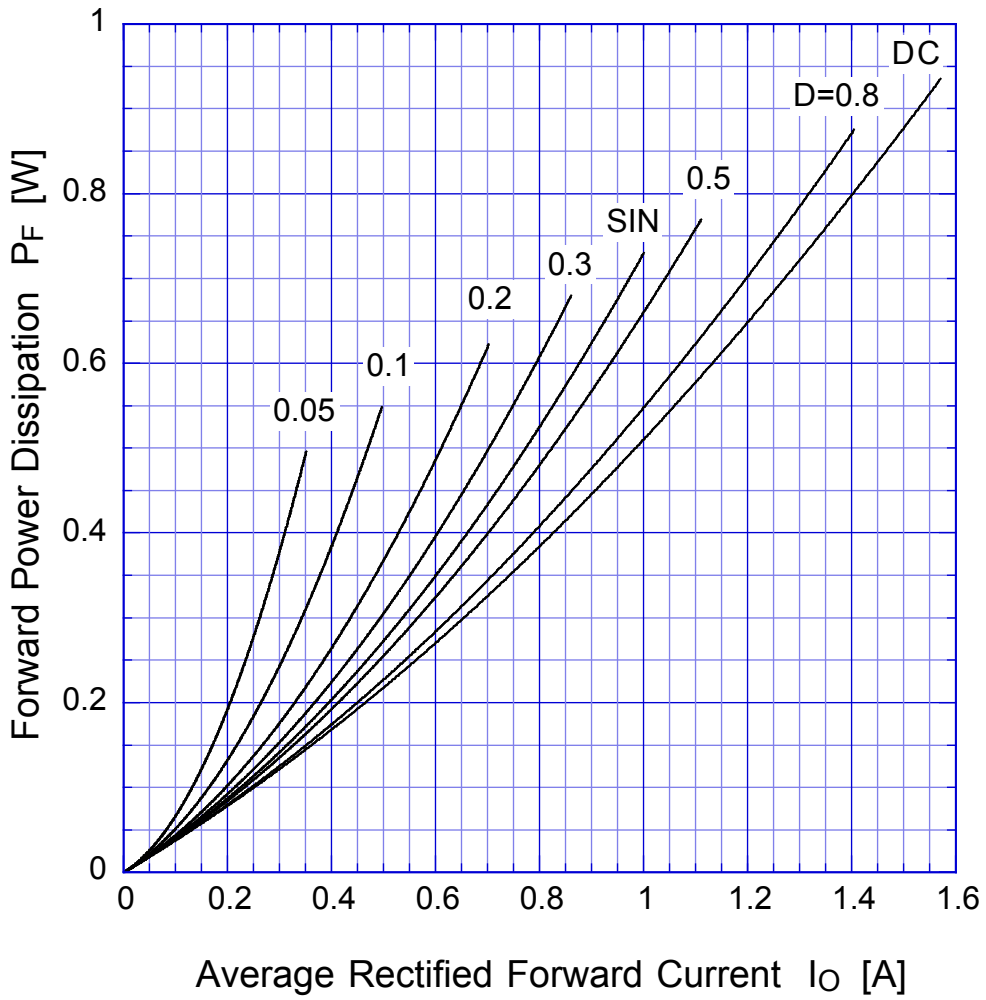


$T_j = 150^\circ\text{C}$

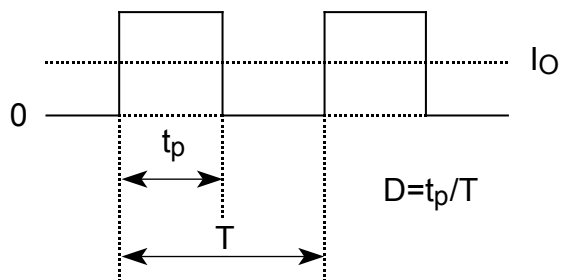


# D1NS6

## Forward Power Dissipation

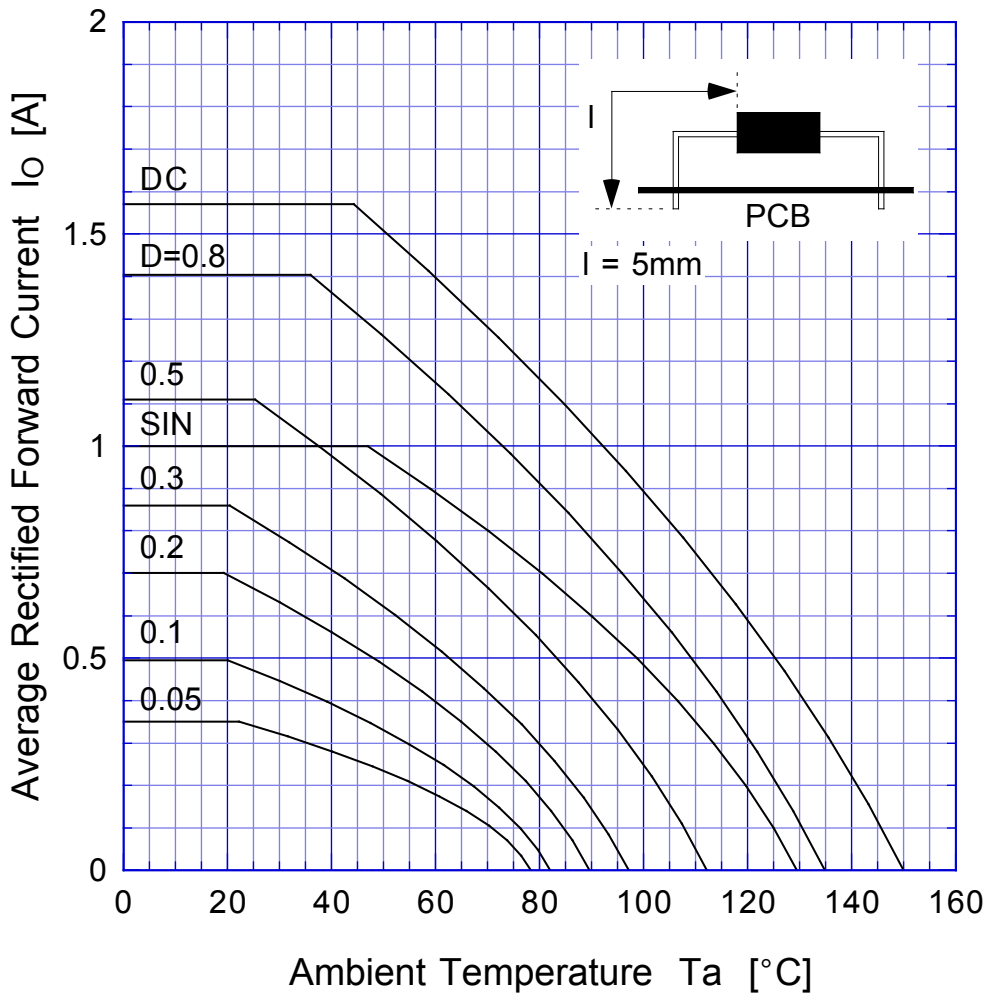


$T_j = 150^\circ\text{C}$

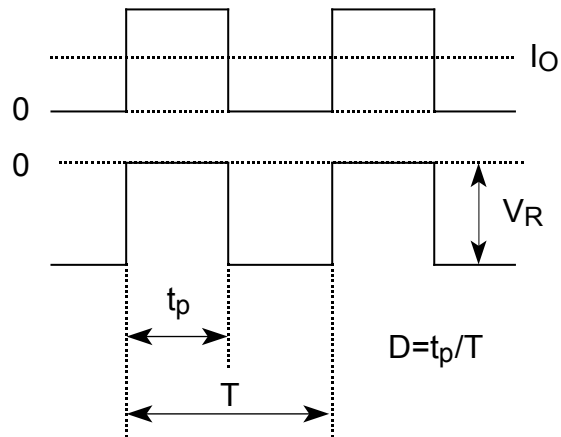


# D1NS6

# Derating Curve

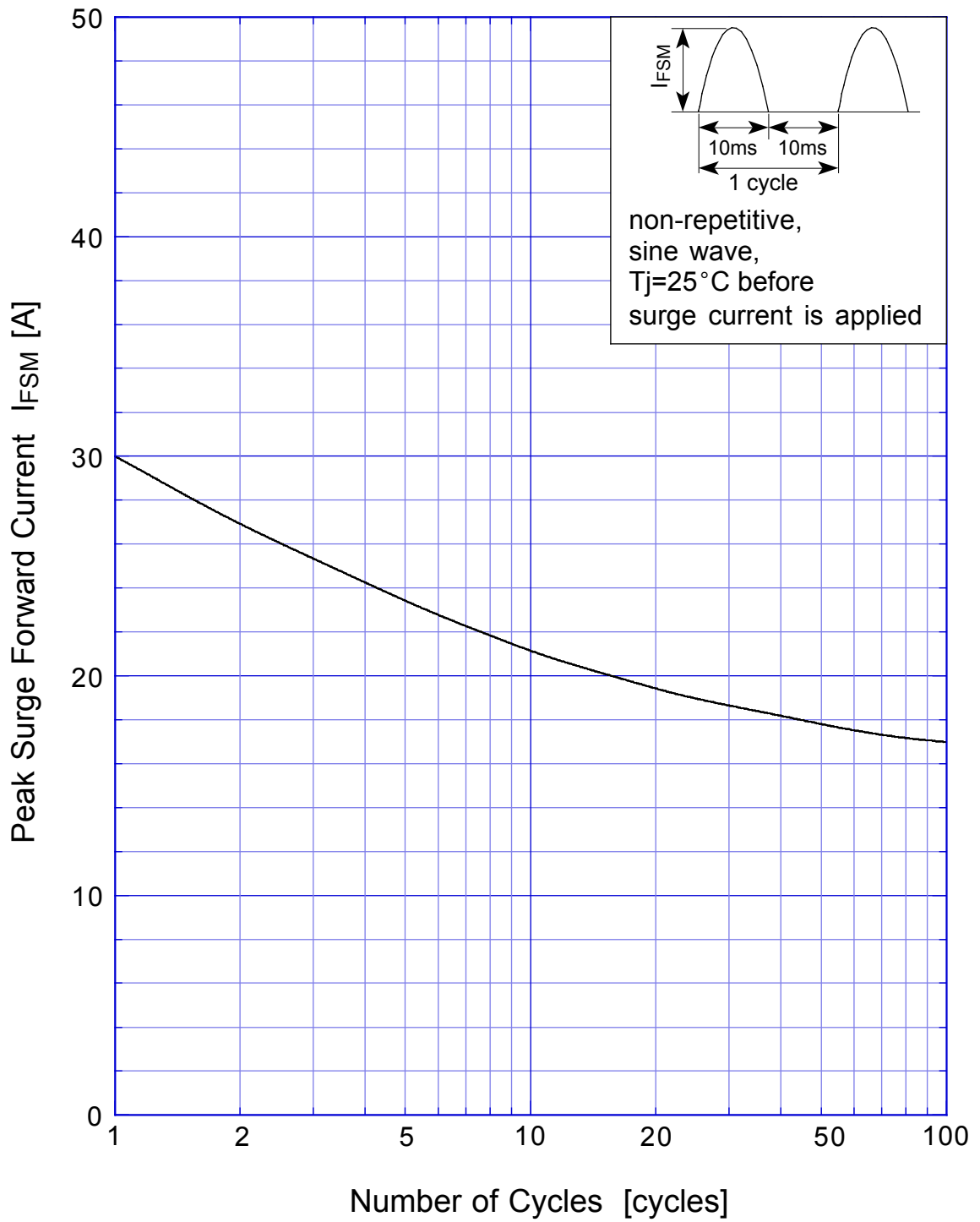


$V_R = 30\text{V}$



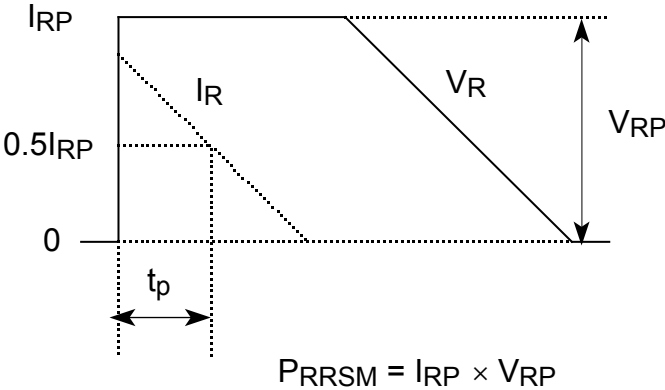
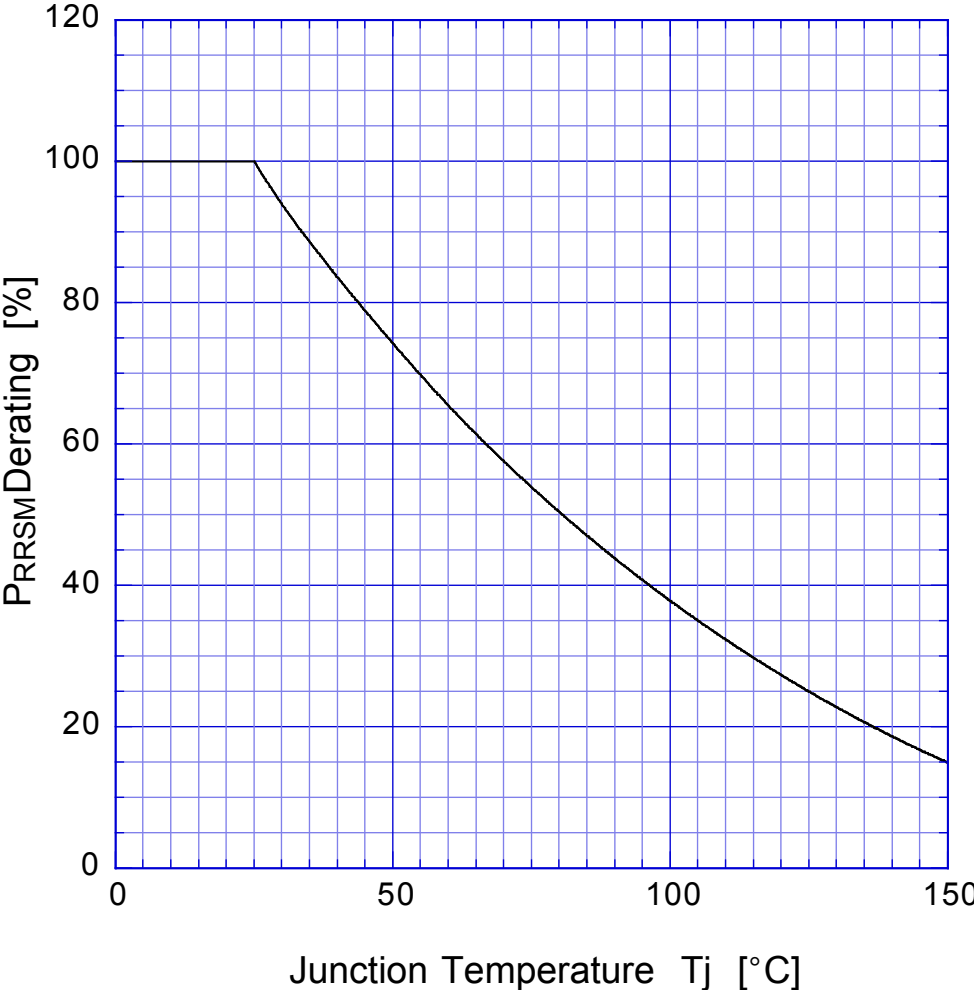
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## Peak Surge Forward Capability





# SBD Repetitive Surge Reverse Power Derating Curve



# SBD

## Repetitive Surge Reverse Power Capability

