

# SHINDENGEN

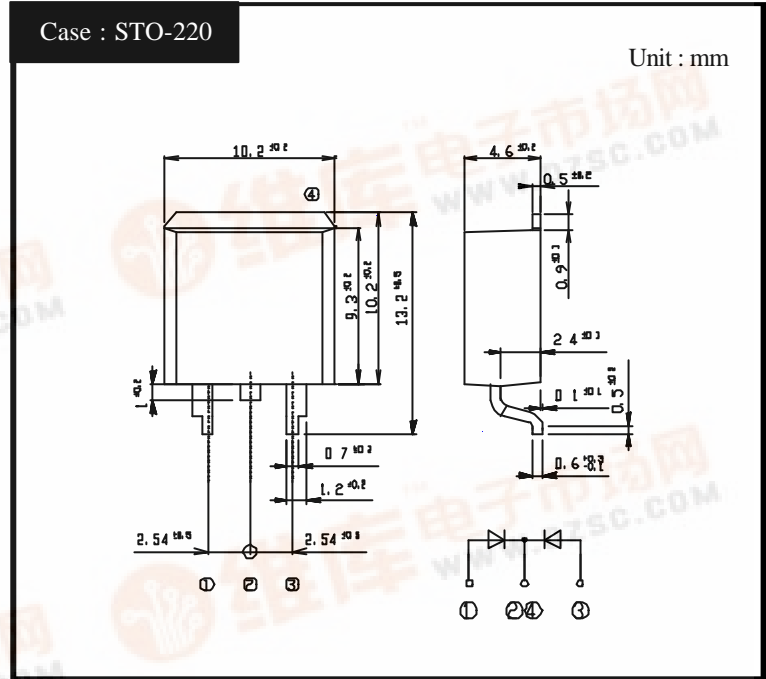
## Schottky Rectifiers (SBD)

Dual

**DF10SC6**

**60V 10A**

### OUTLINE DIMENSIONS



### RATINGS

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

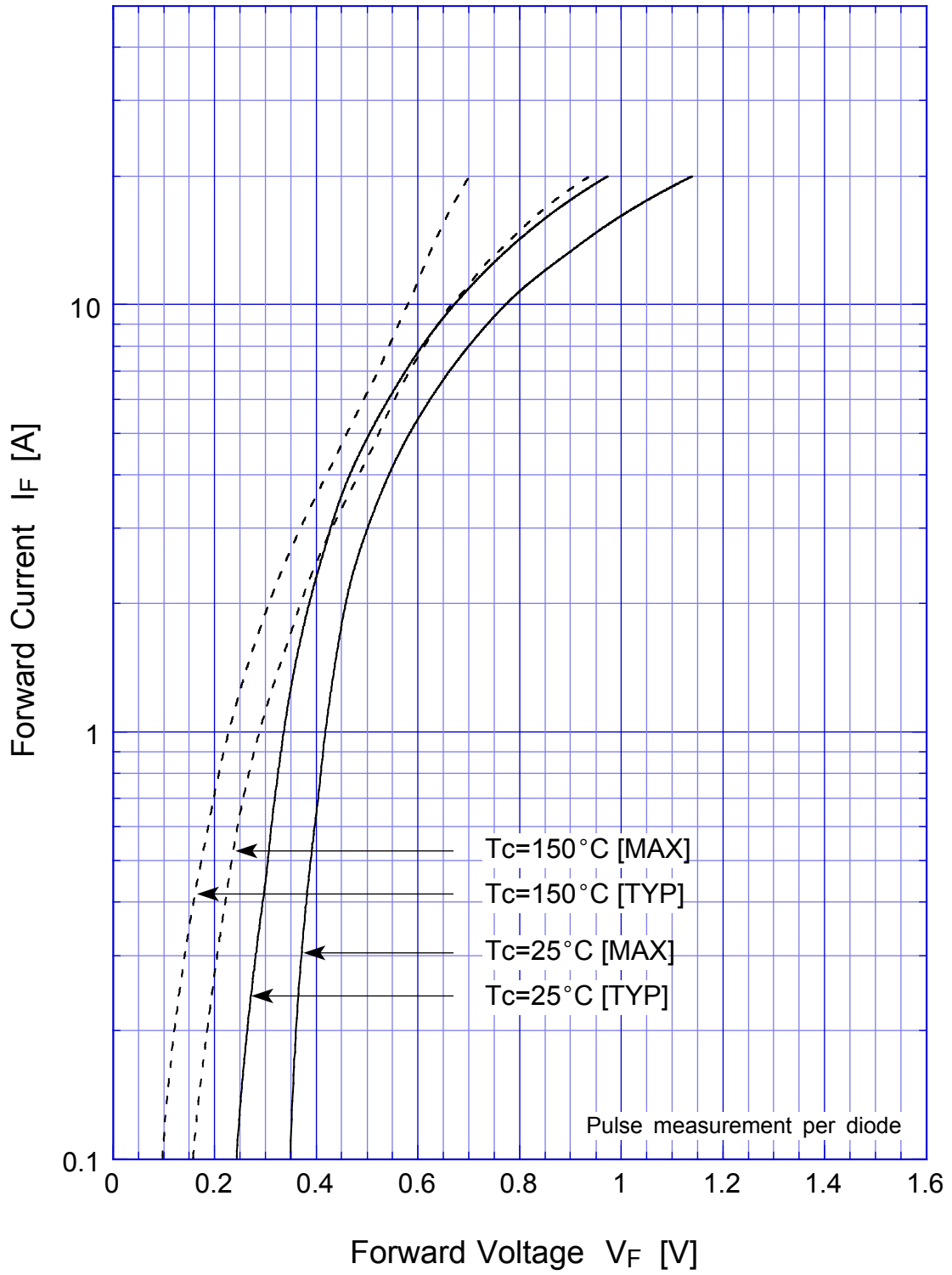
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-55 ~ 150	
Operating Junction Temperature	$T_j$		150	
Peak Reverse Voltage	$V_{RM}$		60	V
Repetitive Peak Surge Reverse Voltage	$V_{RRSM}$	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	$I_o$	50Hz sine wave, R-load, Rating for each diode $I_o/2$ , $T_c=132$	10	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25$	150	A
Repetitive Peak Surge Reverse Power	$P_{RRSM}$	Pulse width 10 $\mu$ s, Rating of per diode, $T_j=25$	330	W

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

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=5A$ , Pulse measurement, Rating of per diode	Max.0.58	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max.4.5	mA
Junction Capacitance	$C_j$	$f=1MHz$ , $V_R=10V$ , Rating of per diode	Typ.260	pF
Thermal Resistance	$\theta_{JC}$	junction to case	Max.2.0	/W

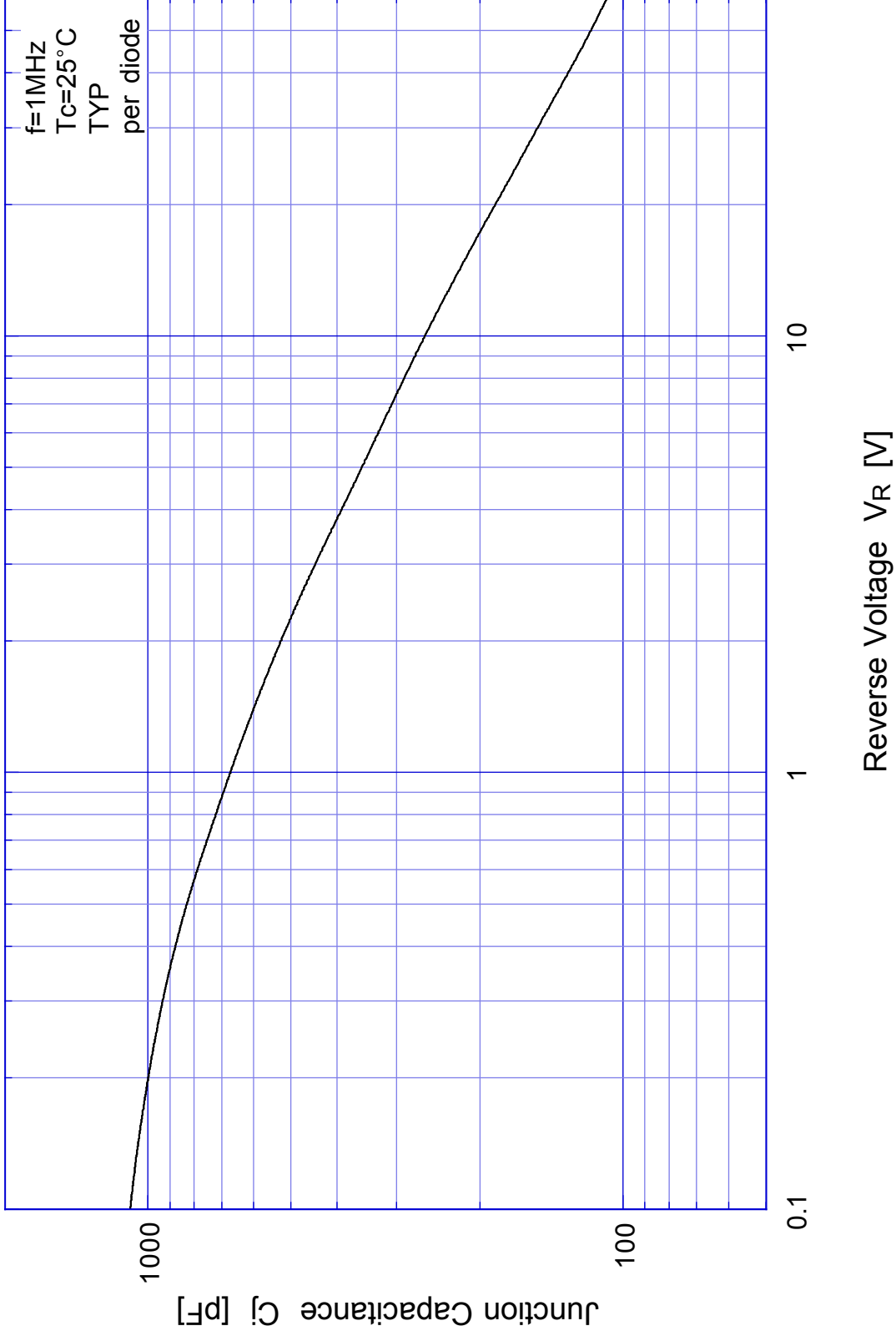
# DF10SC6

## Forward Voltage

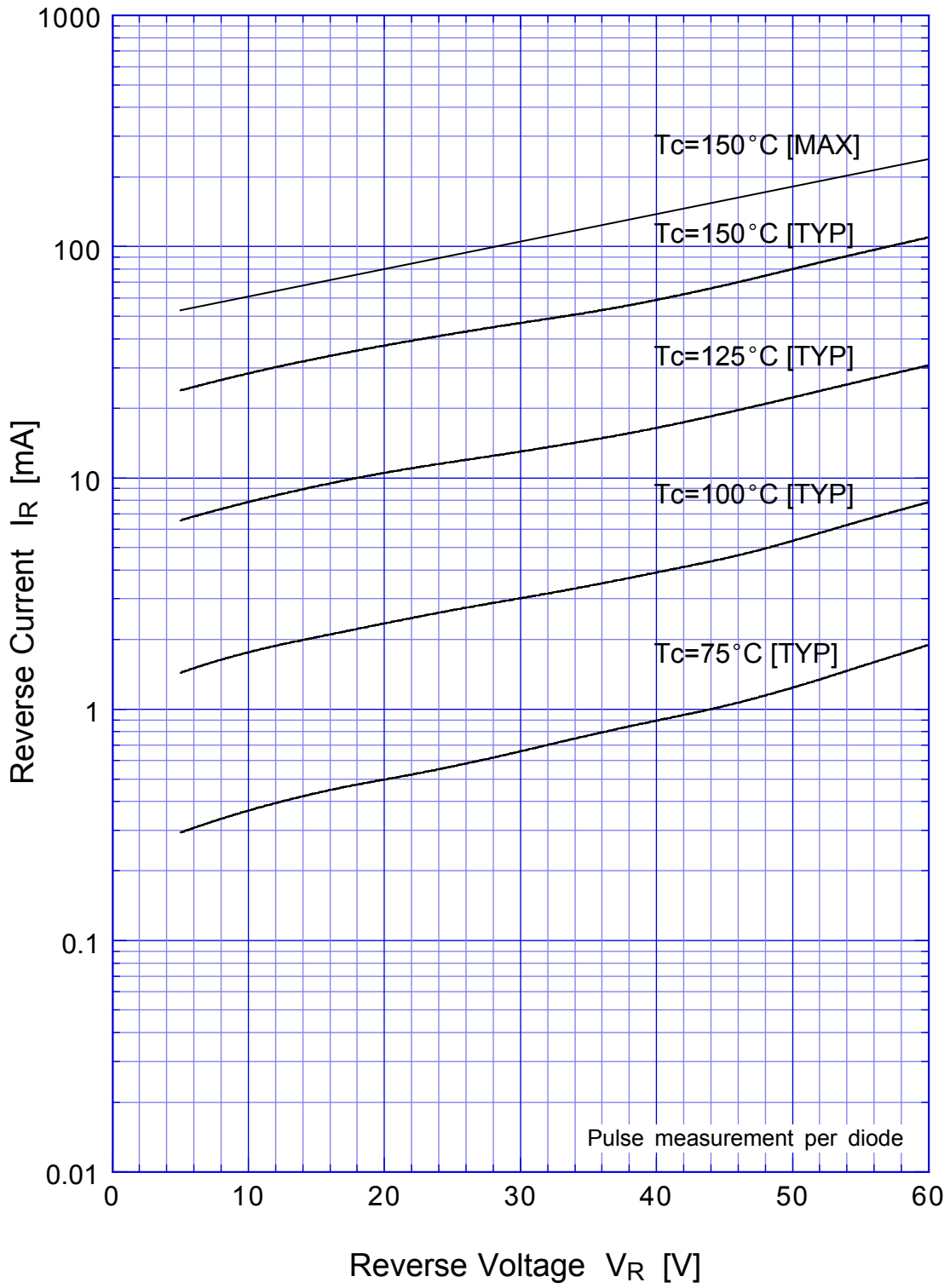


# DF10SC6

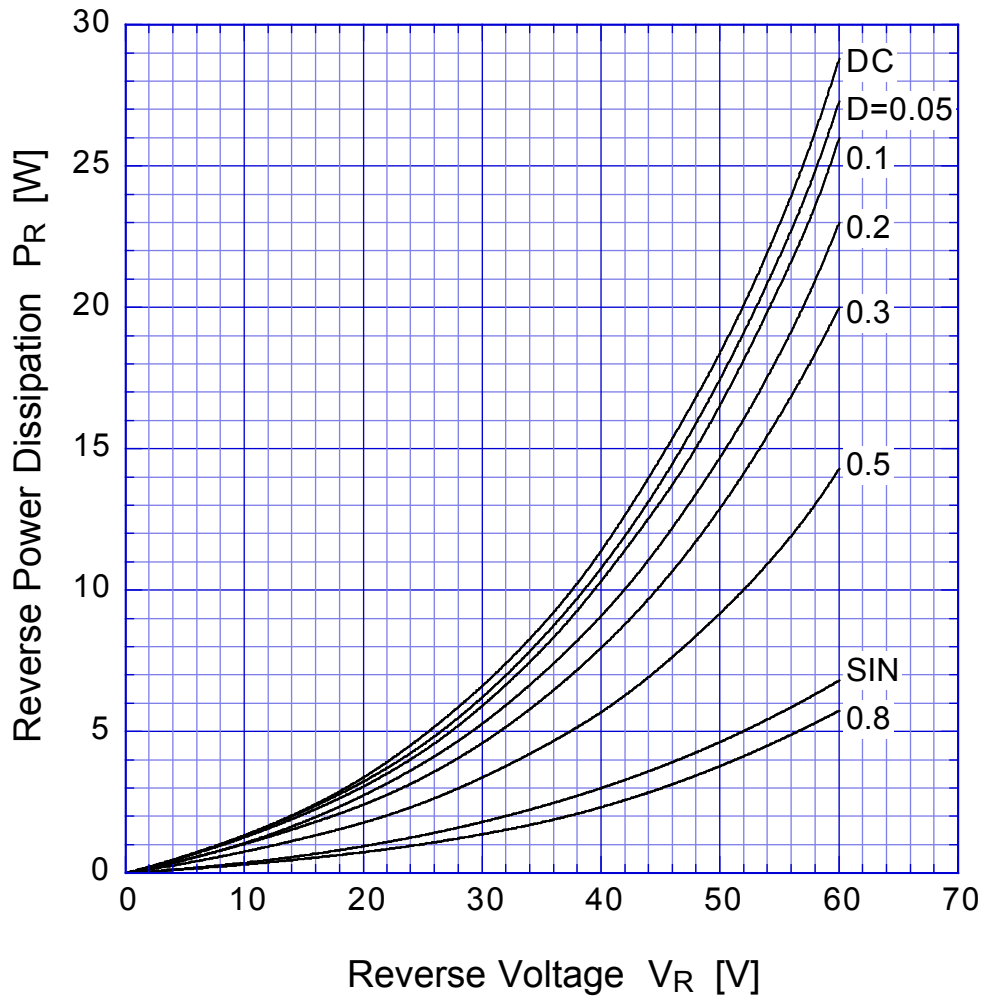
## Junction Capacitance



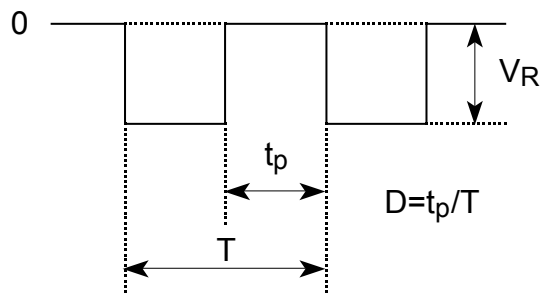
# DF10SC6 Reverse Current



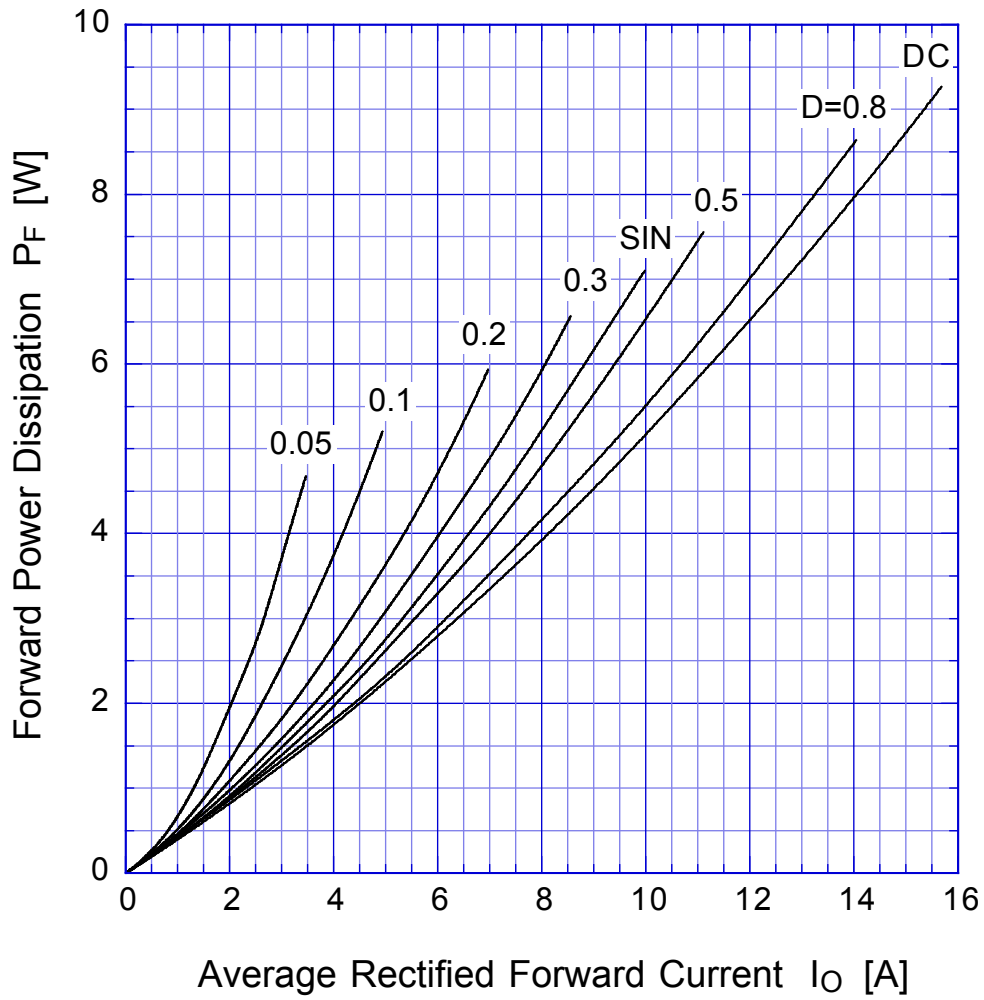
## DF10SC6 Reverse Power Dissipation



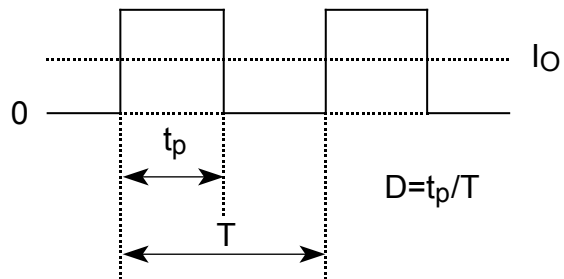
$T_j = 150^\circ\text{C}$



# DF10SC6 Forward Power Dissipation

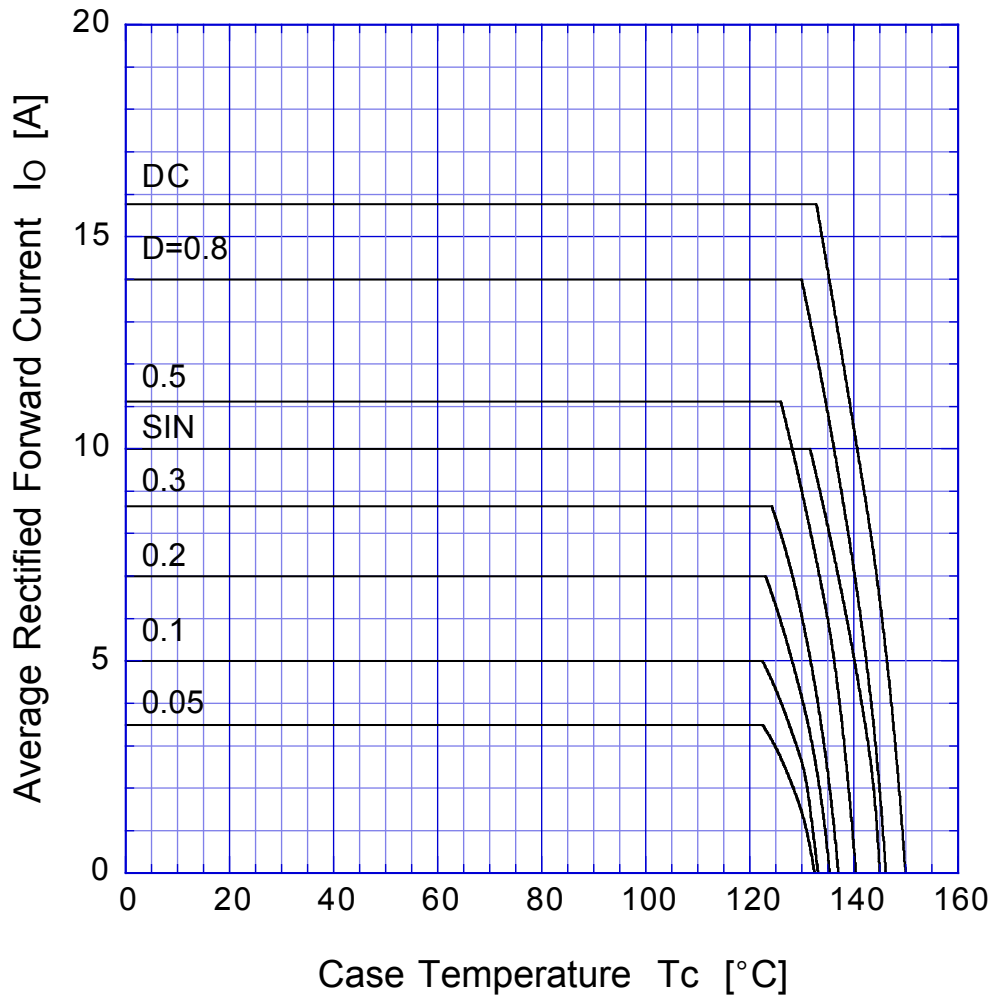


$T_j = 150^\circ\text{C}$

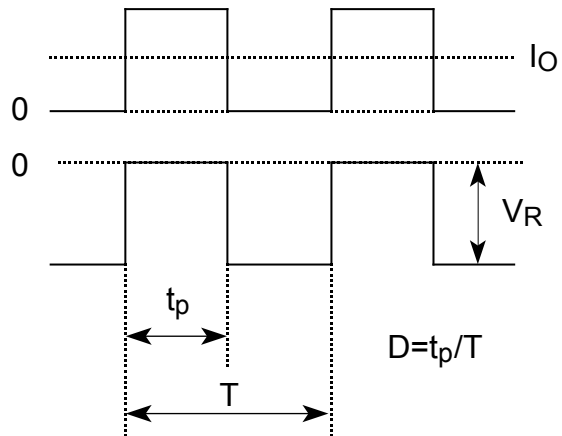


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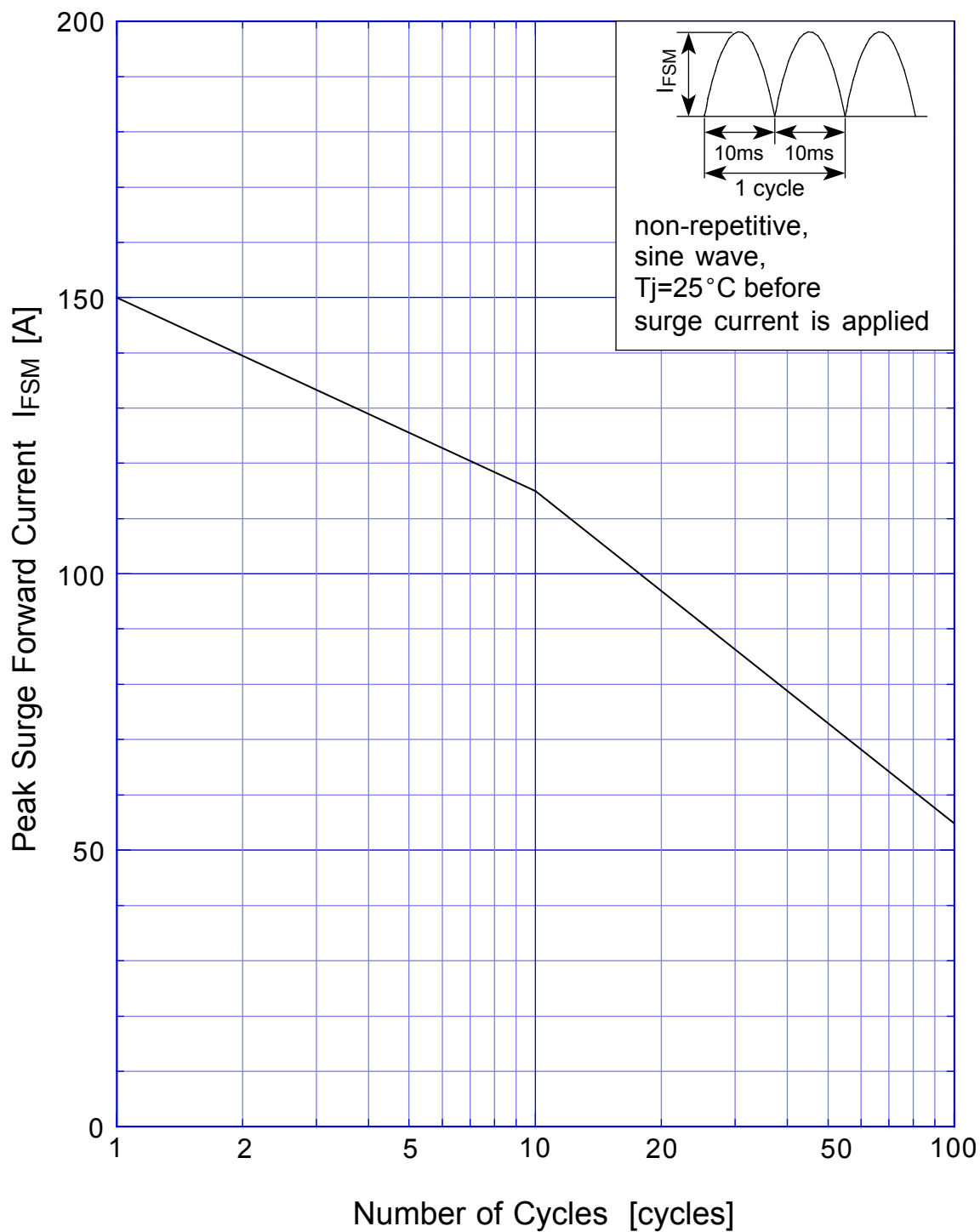
# Derating Curve



$V_R = 30V$

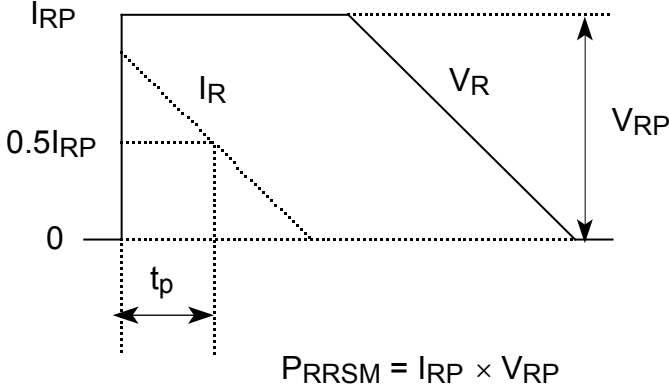
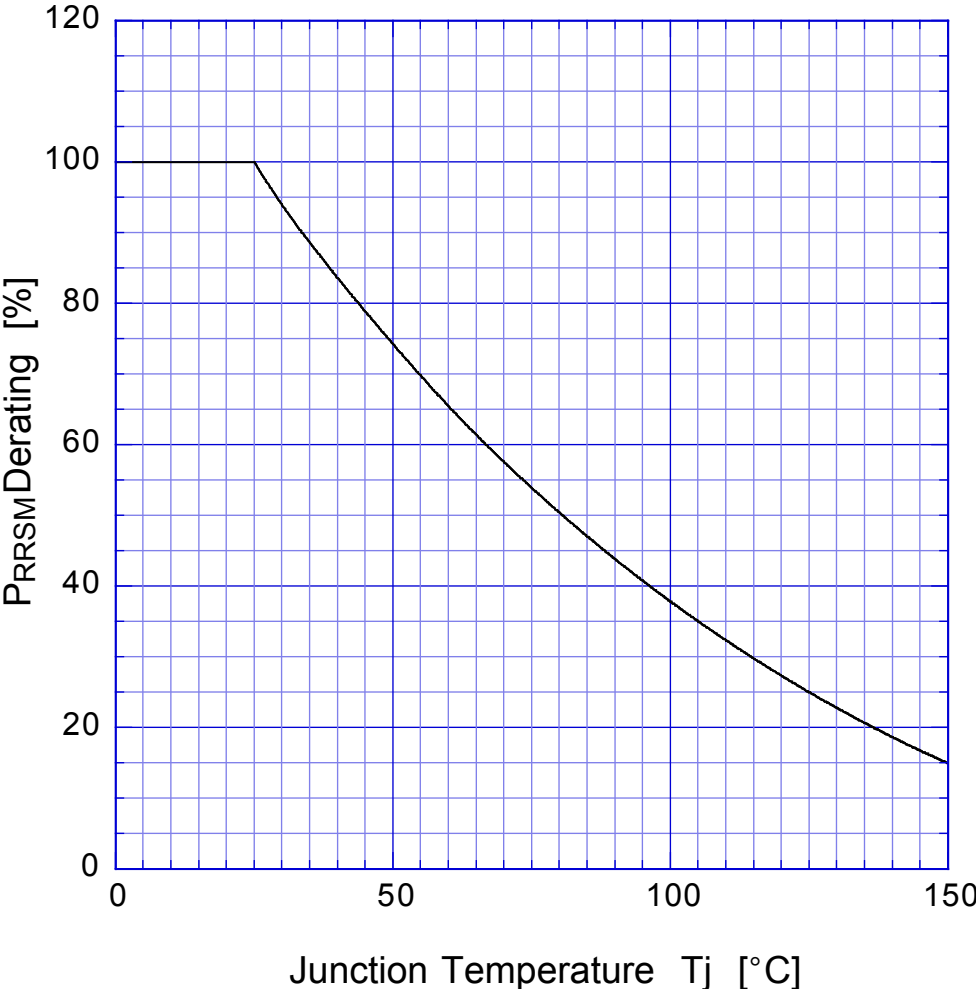


# DF10SC6 Peak Surge Forward Capability





# SBD Repetitive Surge Reverse Power Derating Curve



# SBD

## Repetitive Surge Reverse Power Capability

