

# SHINDENGEN

## Schottky Rectifiers (SBD)

Dual

**D10SC4MR**

**40V 10A**

### FEATURES

T<sub>j</sub>150

P<sub>RRSM</sub> avalanche guaranteed  
Fully Isolated Molding

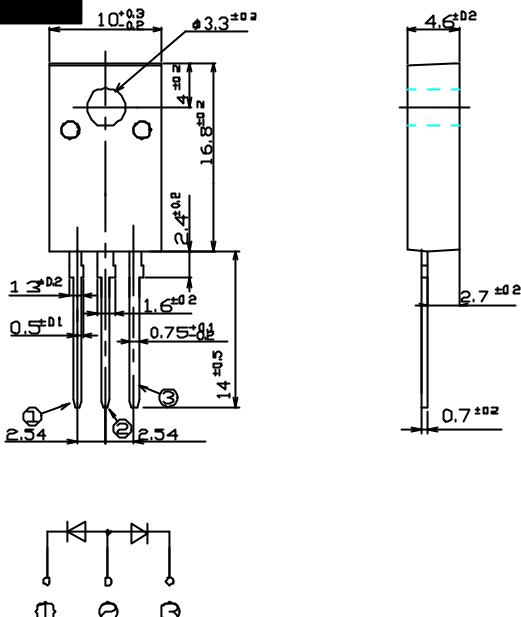
### APPLICATION

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

### OUTLINE DIMENSIONS

Case : ITO-220

Unit : mm



### RATINGS

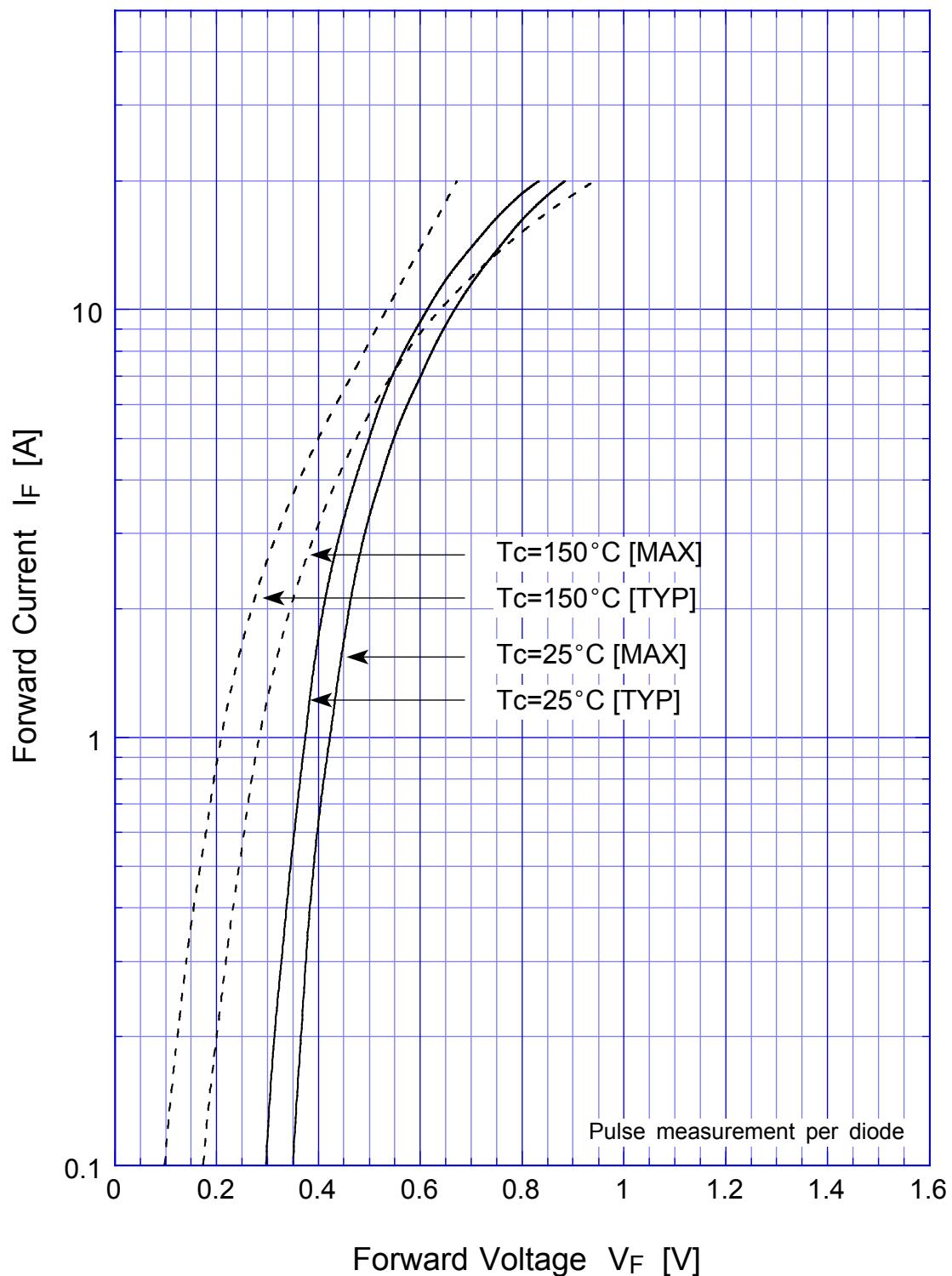
Absolute Maximum Ratings (If not specified T<sub>c</sub>=25 )

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-40 ~ 150	
Operating Junction Temperature	T <sub>j</sub>		150	
Maximum Reverse Voltage	V <sub>RM</sub>		40	V
Repetitive Peak Surge Reverse Voltage	V <sub>RRSM</sub>	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I <sub>o</sub>	50Hz sine wave, R-load, Rating for each diode I <sub>o</sub> /2, T <sub>c</sub> =123	10	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =125	100	A
Repetitive Peak Surge Reverse Power	P <sub>RRSM</sub>	Pulse width 10 μ s, Rating of per diode, T <sub>j</sub> = 25	330	W
Dielectric Strength	V <sub>dis</sub>	Terminals to case, AC 1 minute	1.5	kV
Mounting Torque	T <sub>OR</sub>	(Recommended torque 0.3N·m)	0.5	N·m

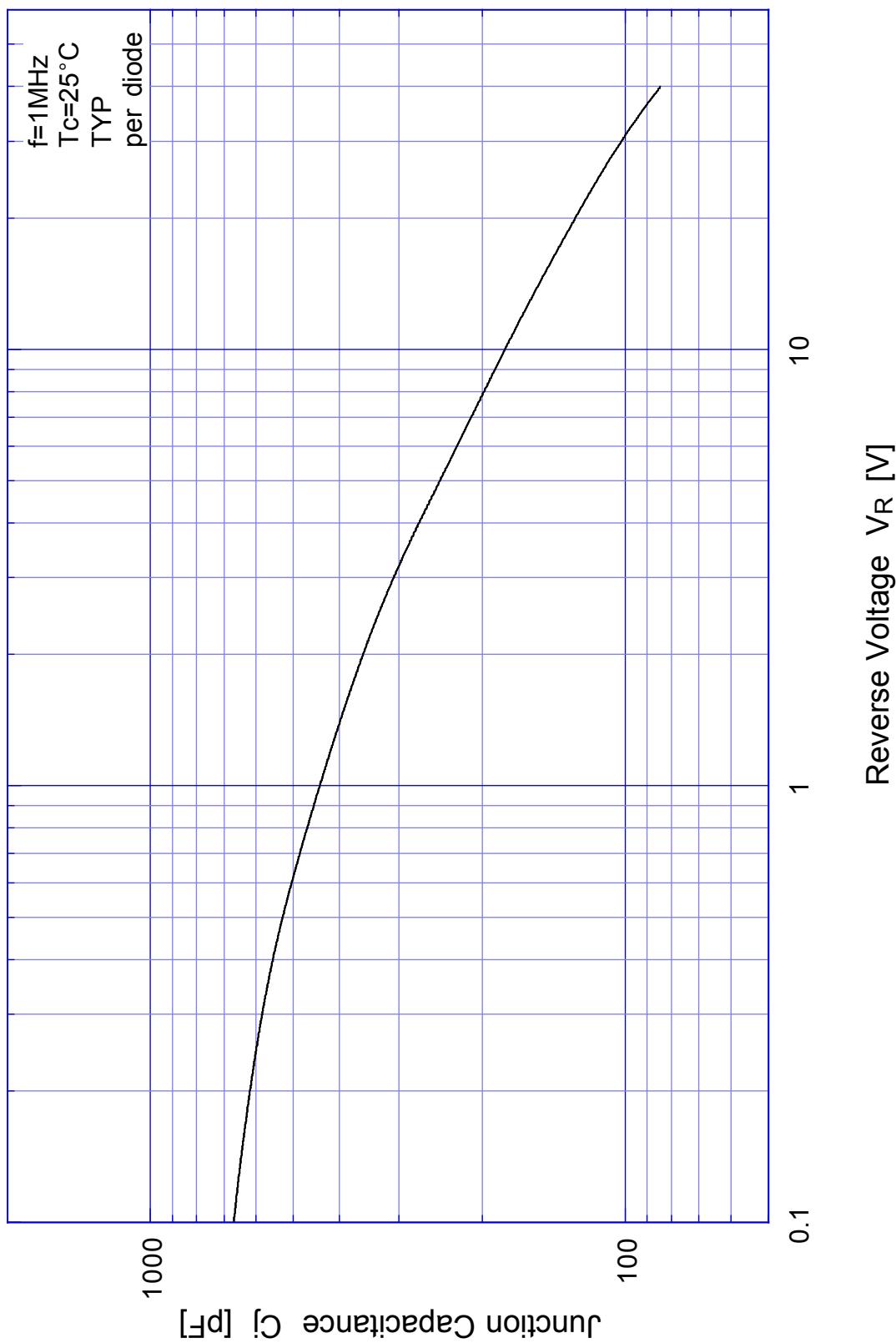
Electrical Characteristics (If not specified T<sub>c</sub>=25 )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =5A, Pulse measurement, Rating of per diode	Max.0.55	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max. 3.5	mA
Junction Capacitance	C <sub>j</sub>	f=1MHz, V <sub>R</sub> =10V, Rating of per diode	Typ.180	pF
Thermal Resistance	j <sub>c</sub>	junction to case	Max.3.3	/W
	c <sub>f</sub>		Max.1.5	

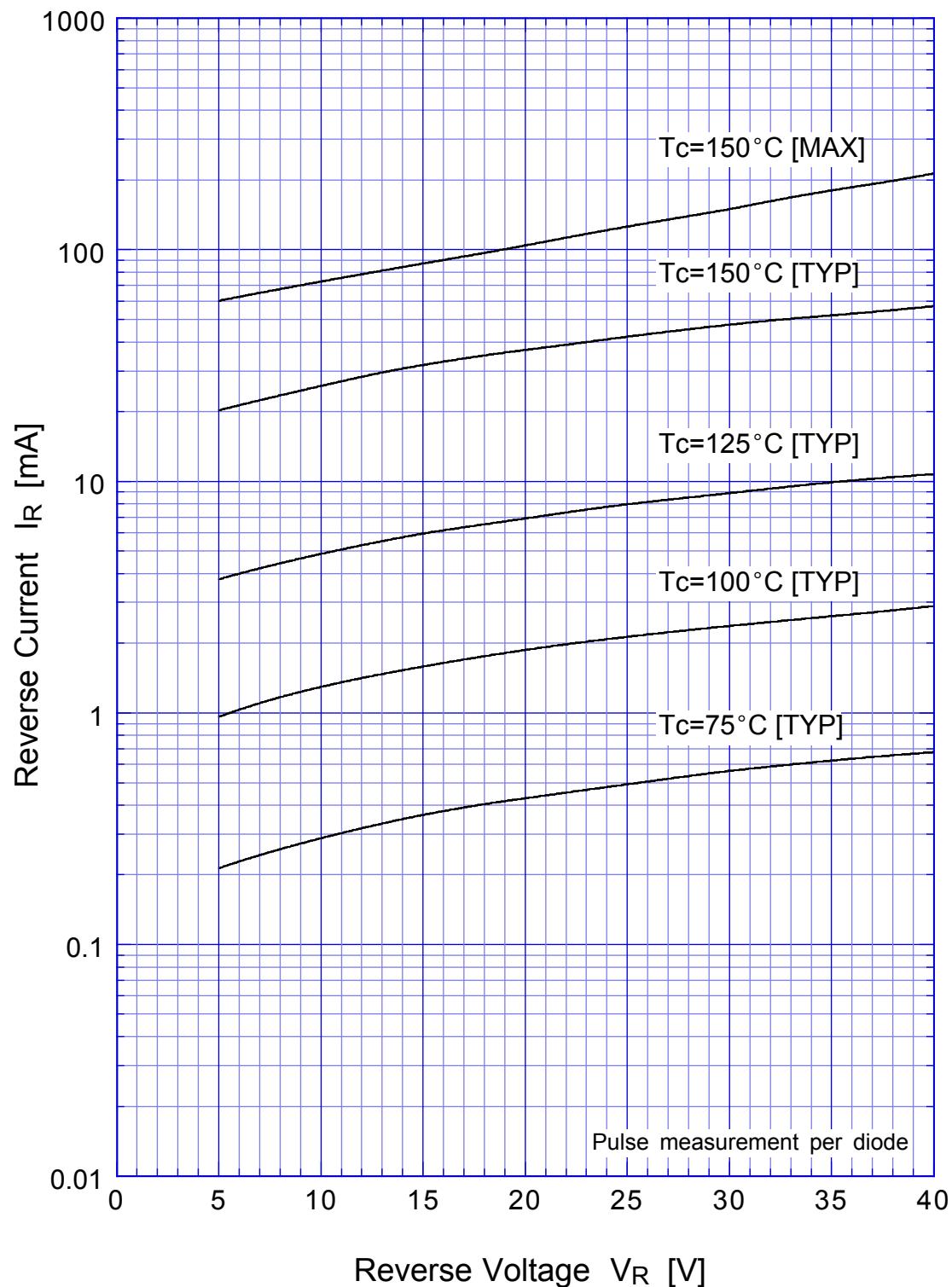
## D10SC4MR    Forward Voltage



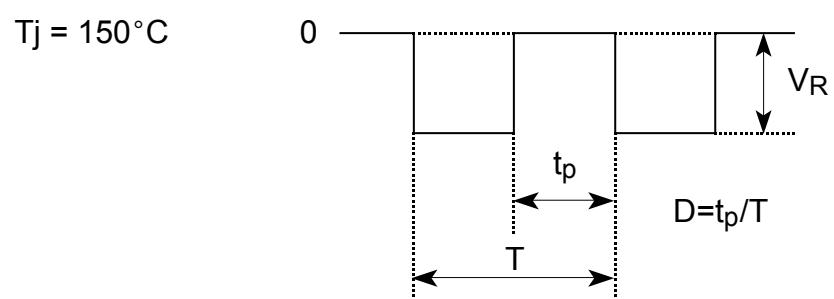
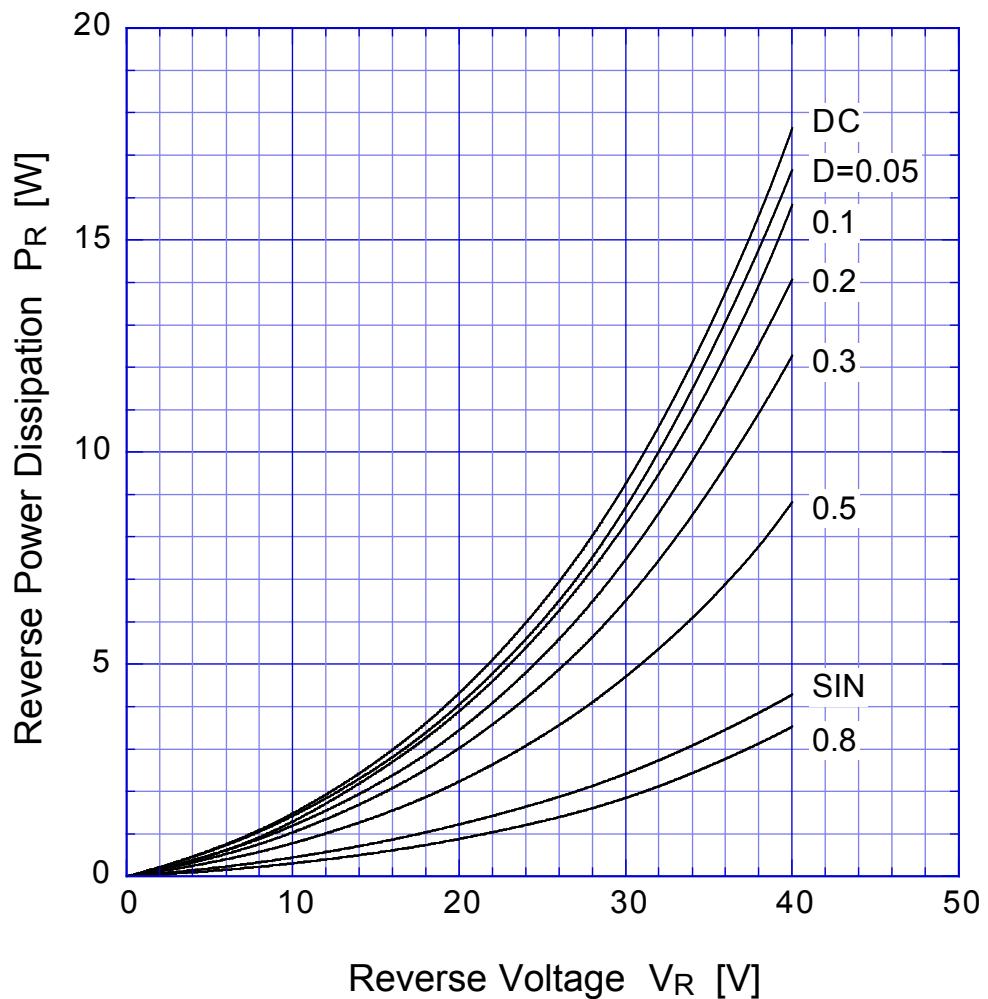
# D10SC4MR Junction Capacitance



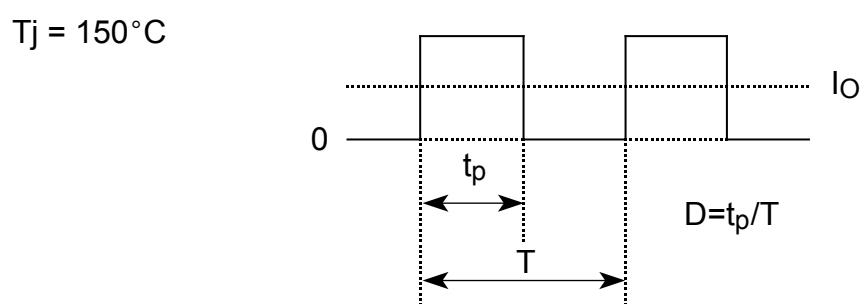
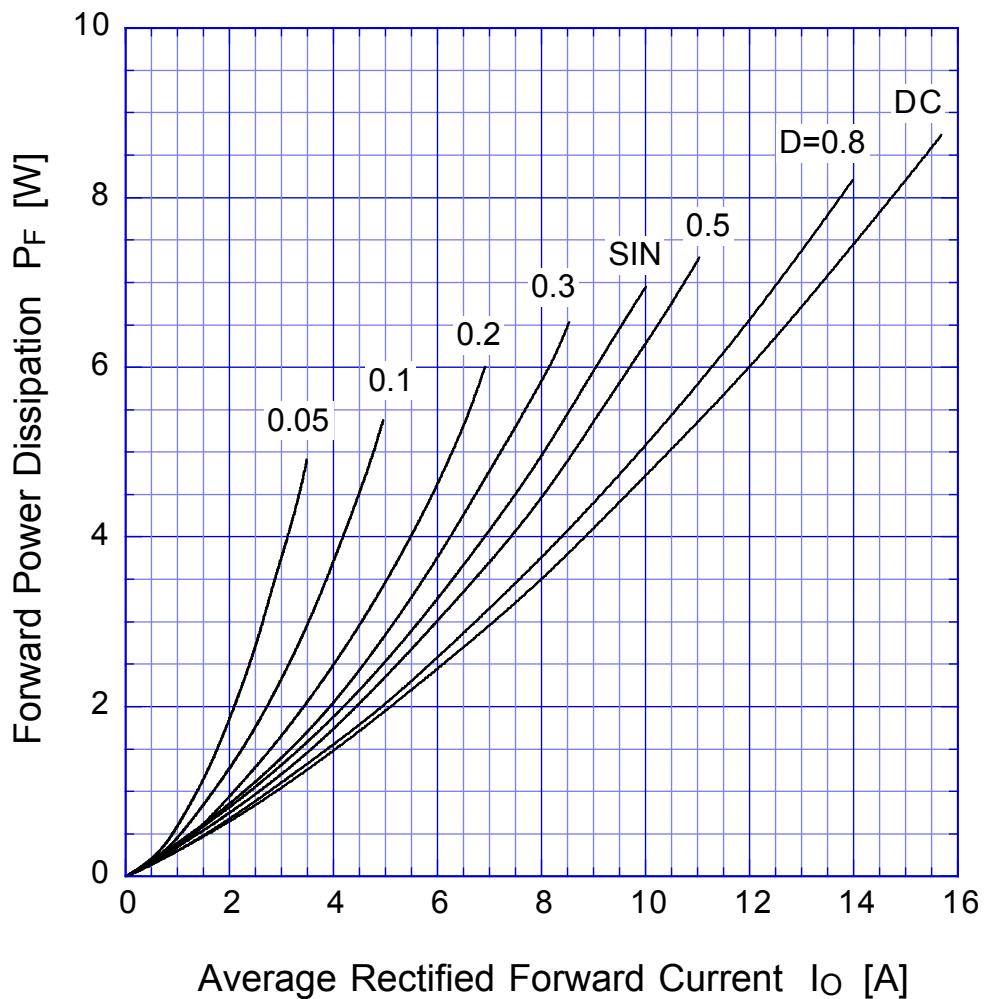
## D10SC4MR Reverse Current

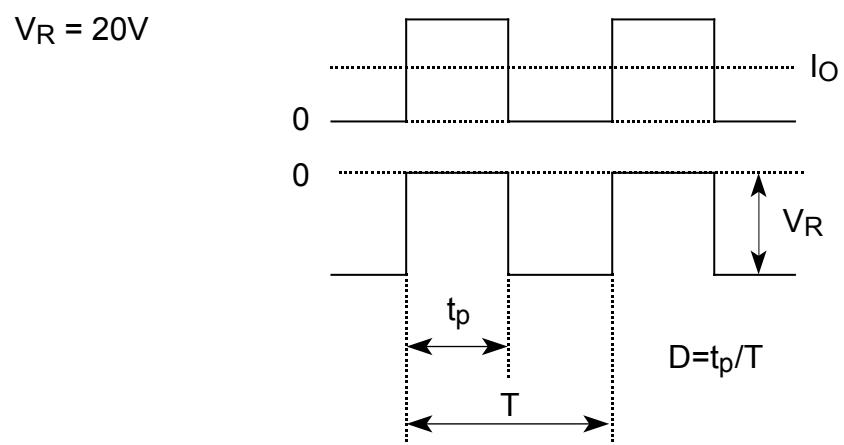
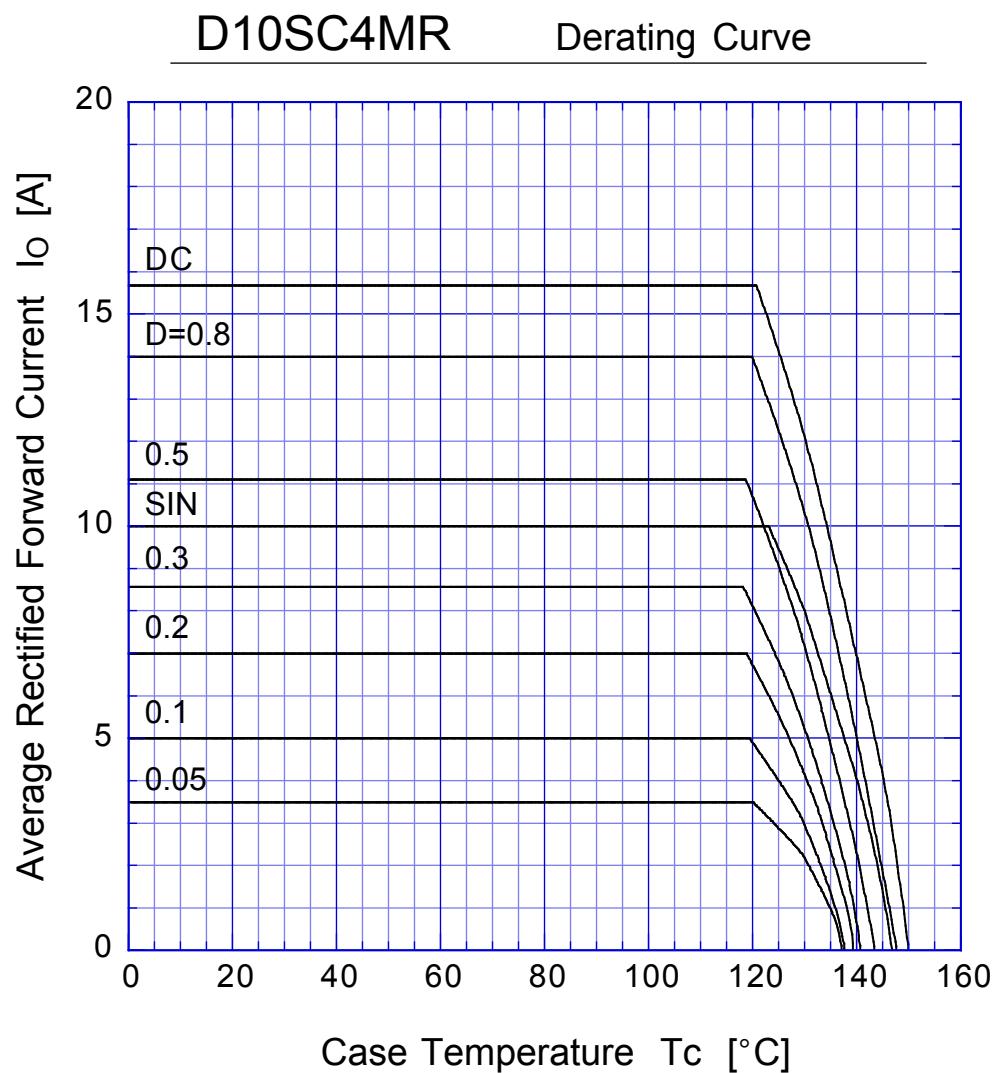


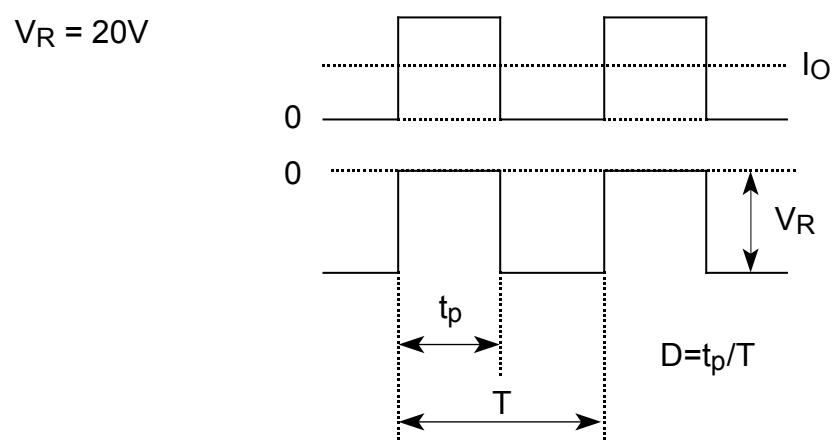
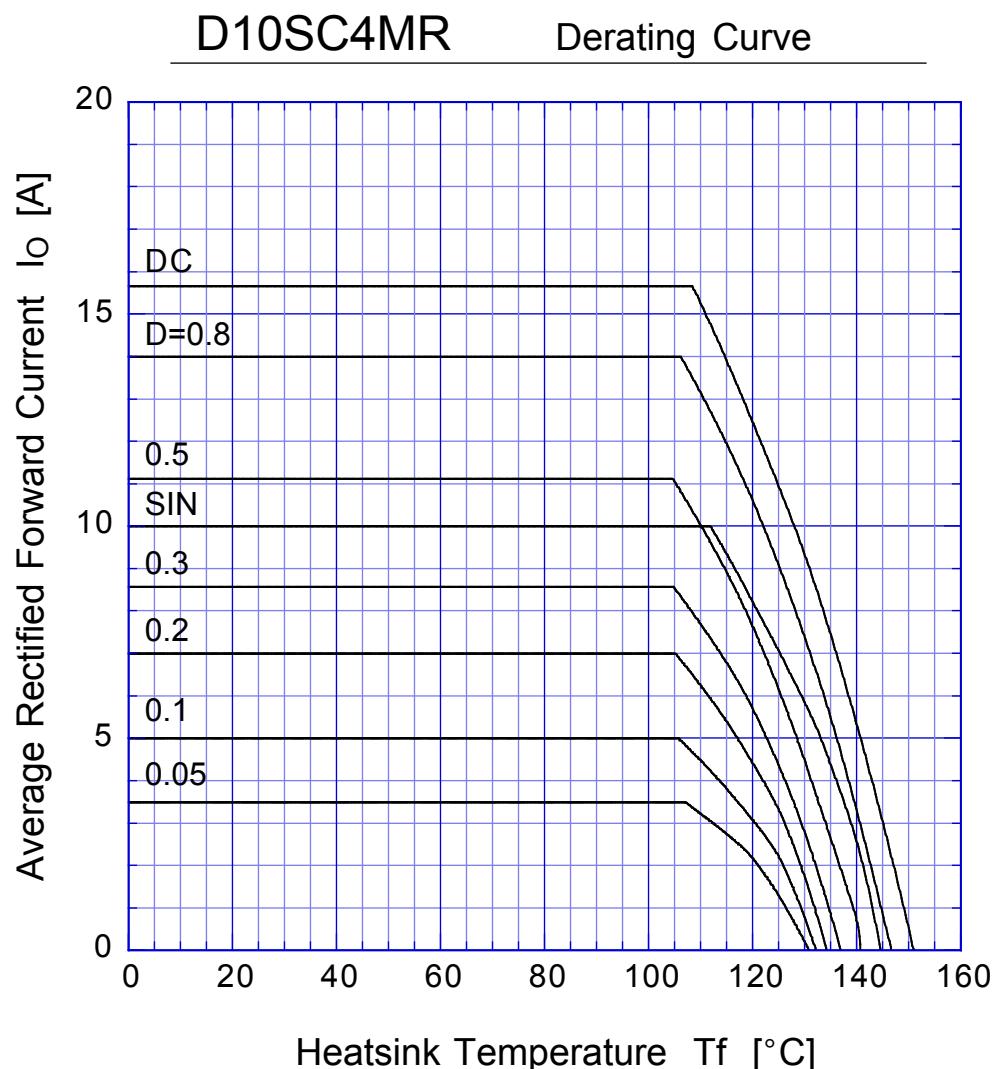
## D10SC4MR Reverse Power Dissipation



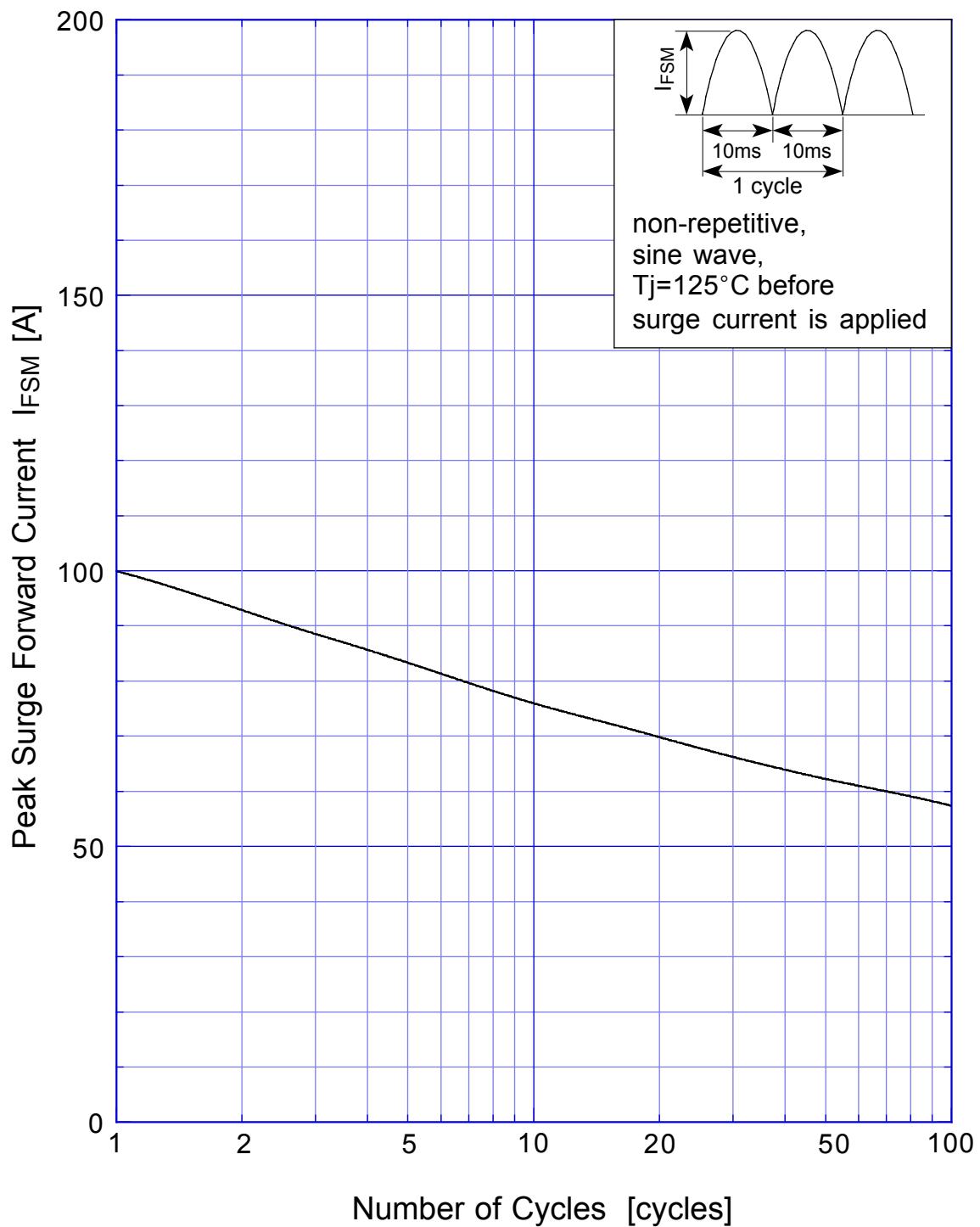
## D10SC4MR Forward Power Dissipation



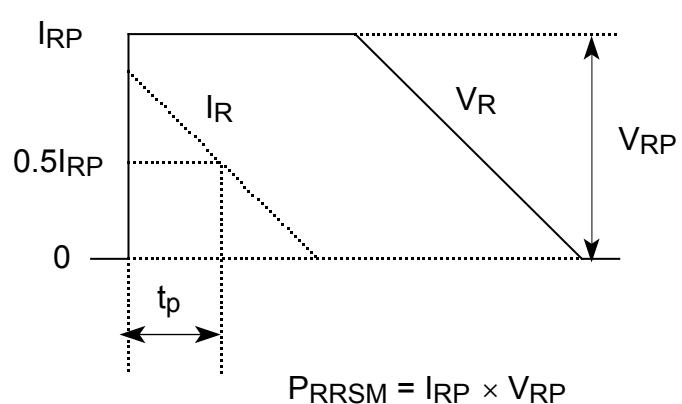
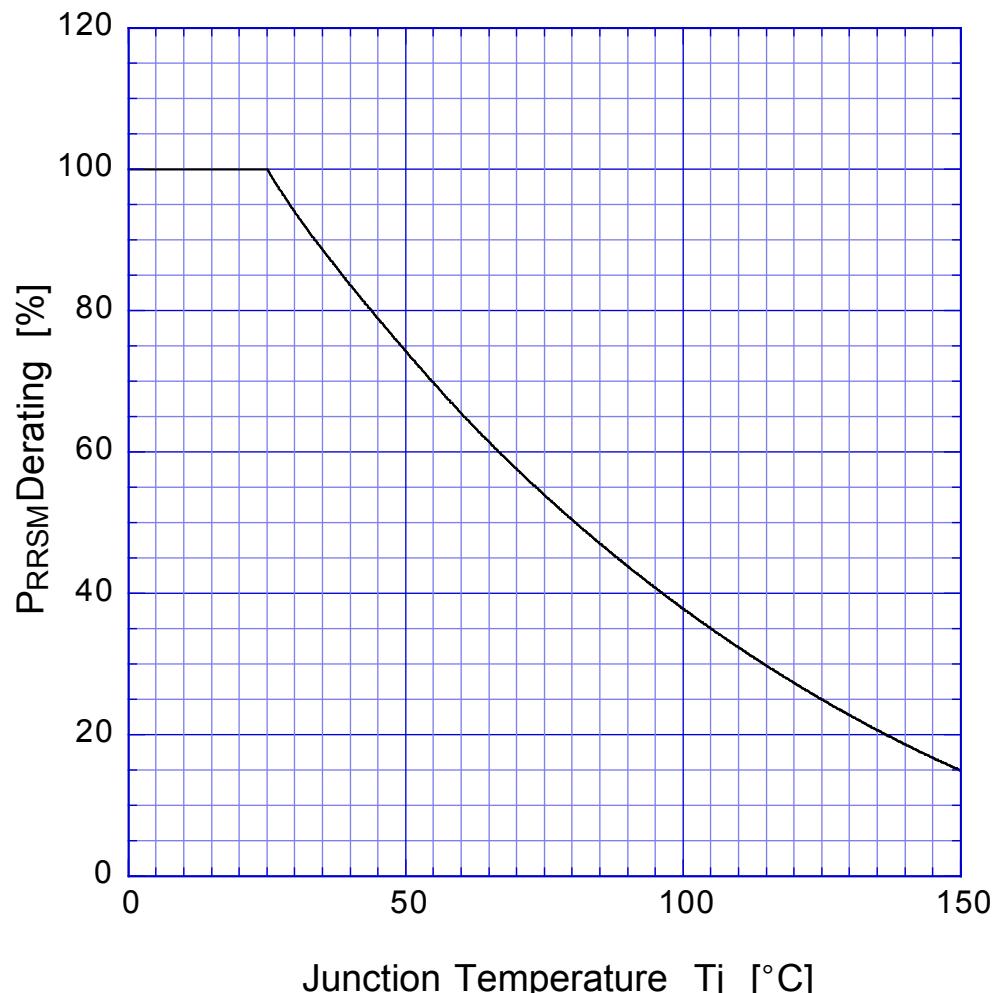




## D10SC4MR Peak Surge Forward Capability



## SBD Repetitive Surge Reverse Power Derating Curve



## SBD Repetitive Surge Reverse Power Capability

