SHINDENGEN

Schottky Rectifiers (SBD)

Dual

DF10SC9

90V 10A

FEATURES

- SMT
- Tj150℃
- P_{RRSM} avalanche guaranteed
- High current capacity with Small Package

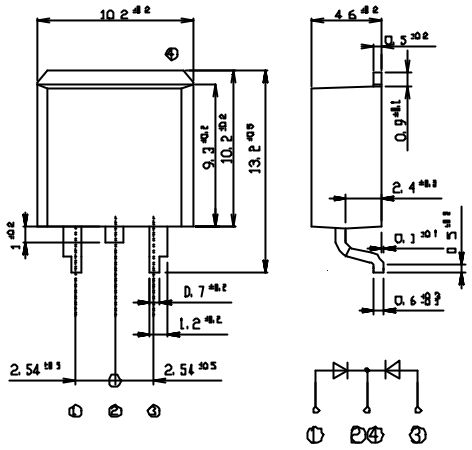
APPLICATION

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

OUTLINE DIMENSIONS

Case : STO-220

Unit : mm



RATINGS

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

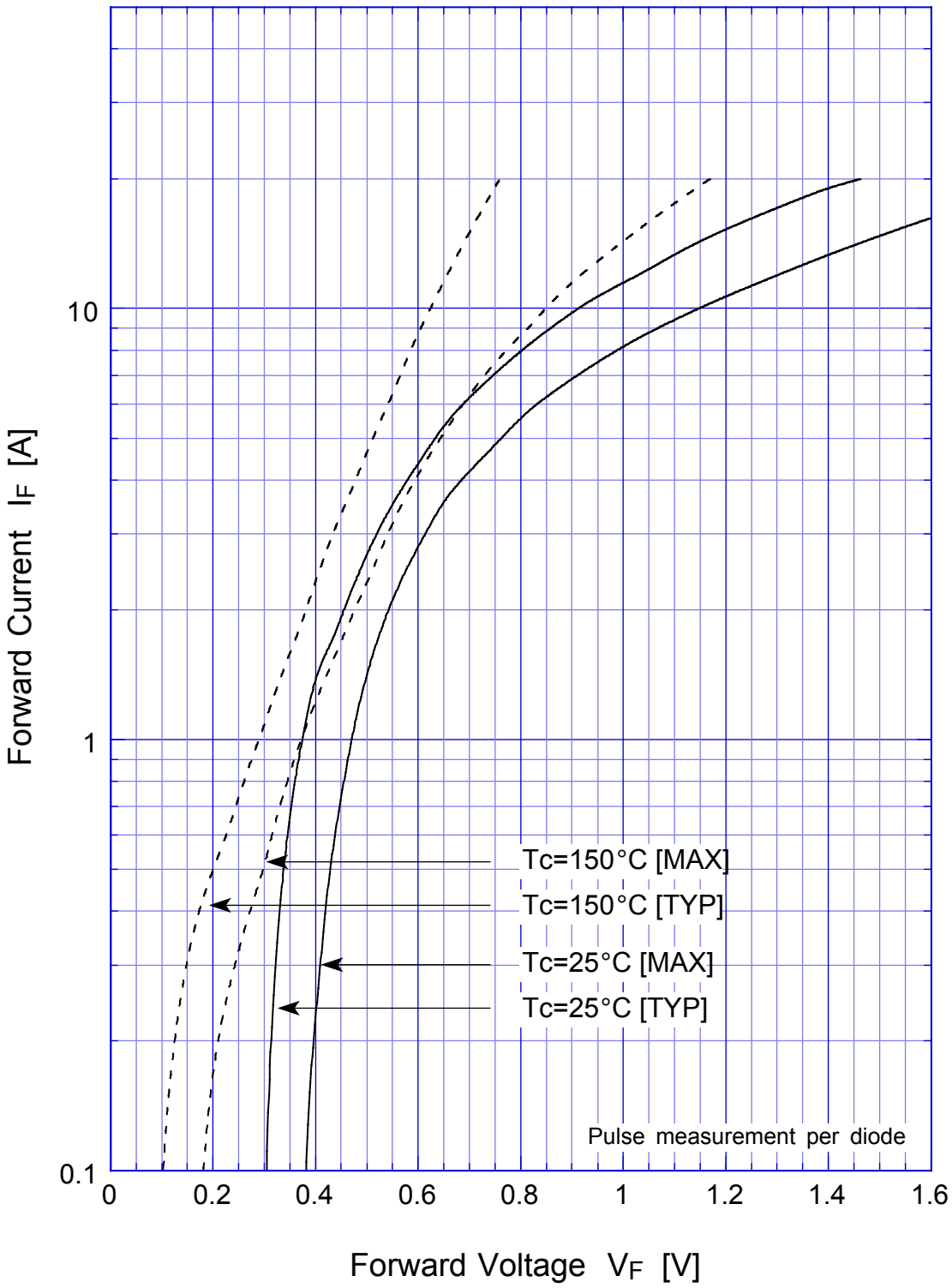
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55～150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V_{RM}		90	V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	Pulse width 0.5ms, duty 1/40	100	V
Average Rectified Forward Current	Io	50Hz sine wave, R-load, Rating for each diode Io/2, Tc=131°C	10	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125°C	150	A
Repetitive Peak Surge Reverse Power	P_{RRSM}	Pulse width 10μs, Rating of per diode, Ti=25°C	330	W

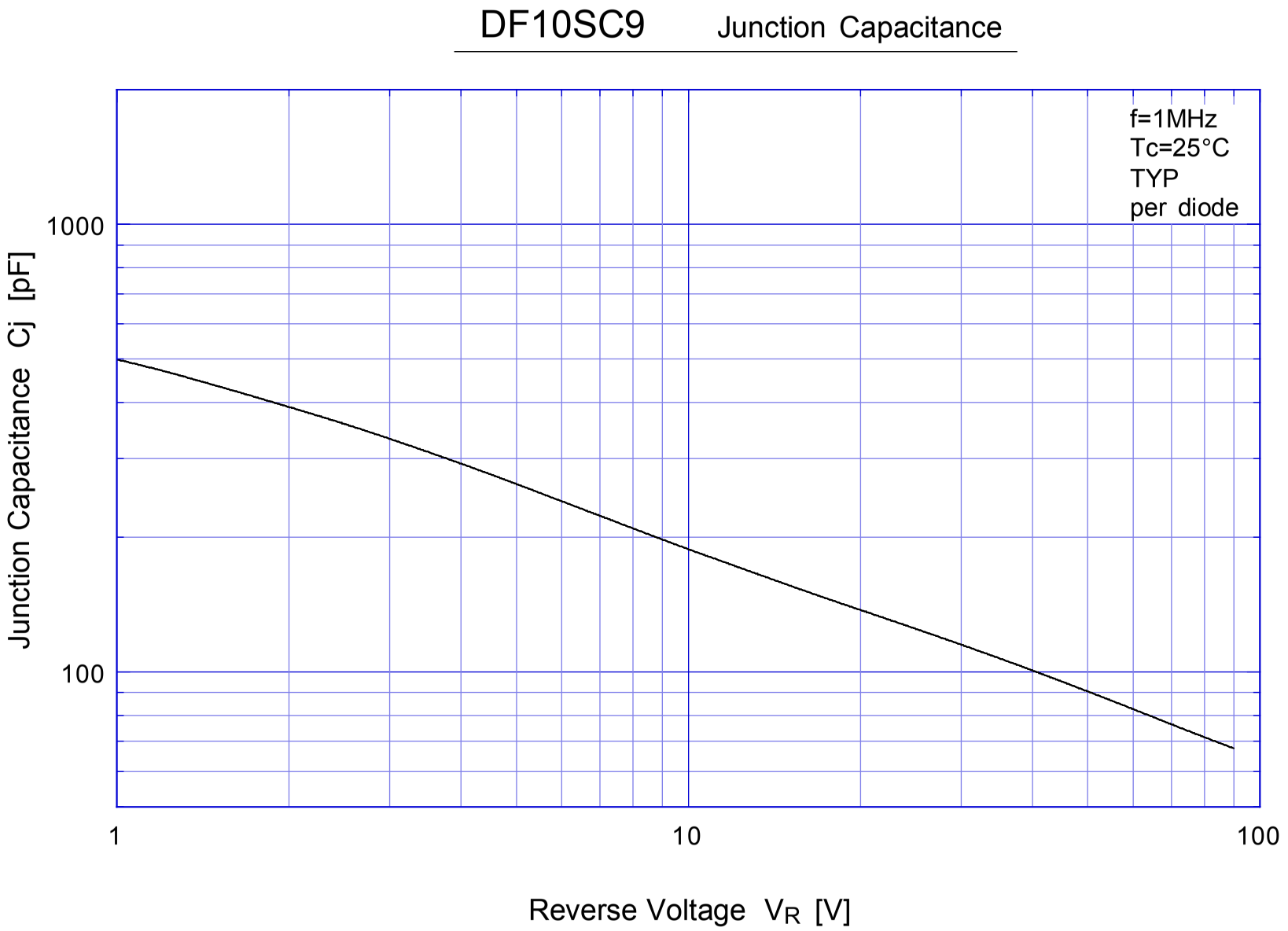
●Electrical Characteristics (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	I_F=5A, Pulse measurement, Rating of per diode	Max.0.75	V
Reverse Current	I_R	V_R=V_{RM}, Pulse measurement, Rating of per diode	Max.3	mA
Junction Capacitance	Cj	f=1MHz, V_R=10V, Rating of per diode	Typ.185	pF
Thermal Resistance	θjc	junction to case	Max.1.2	°C/W

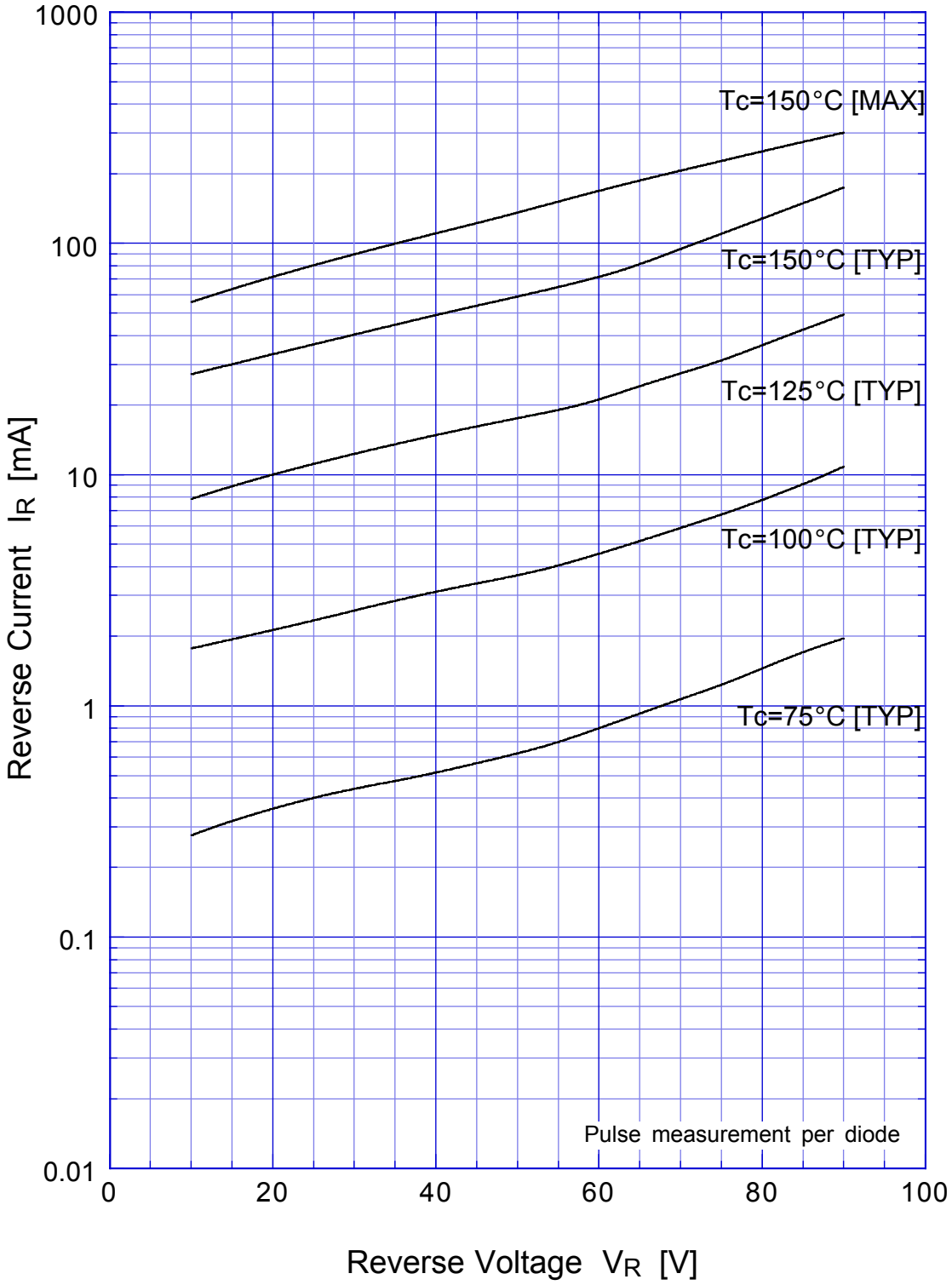
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DF10SC9 Forward Voltage

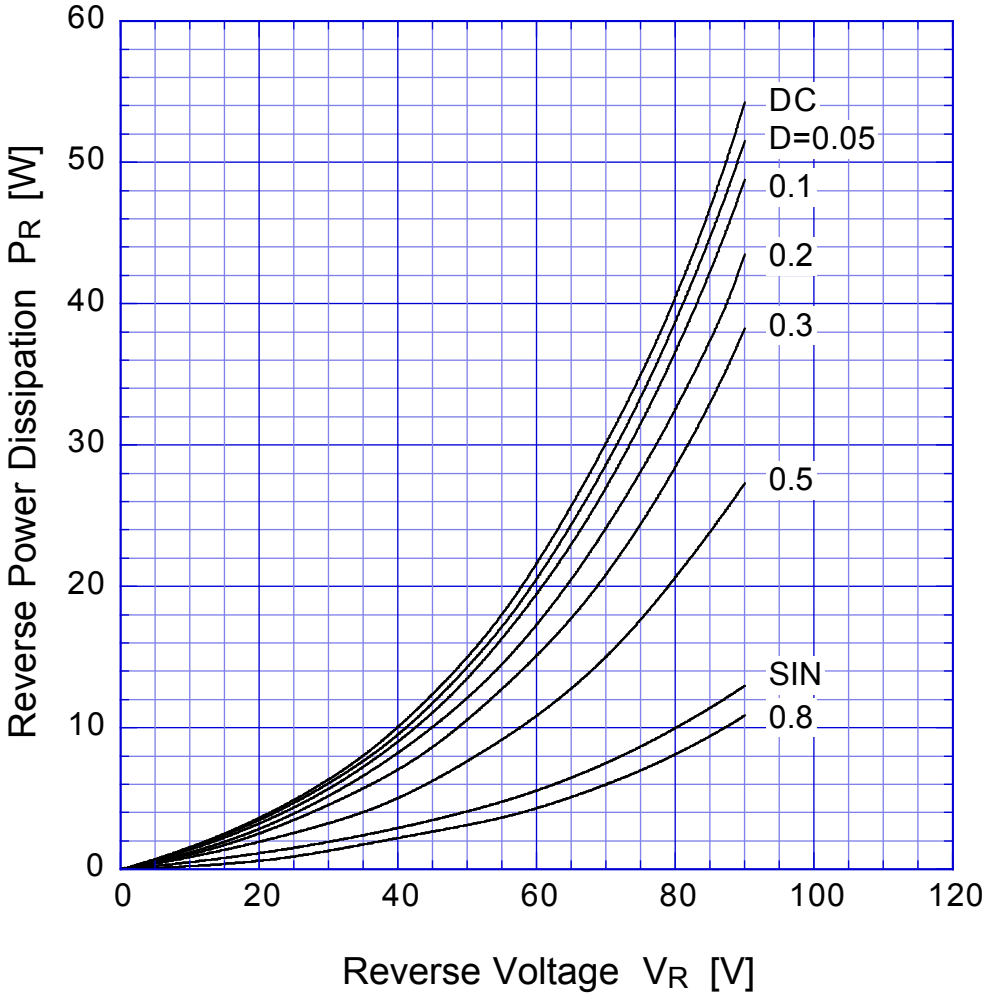



DF10SC9
Junction Capacitance
f=1MHz
Tc=25°C
TYP
per diode
1000
100
Junction Capacitance Cj [pF]
1
10
100
Reverse Voltage VR [V]

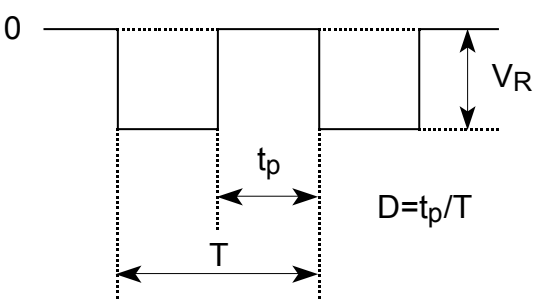
DF10SC9 Reverse Current



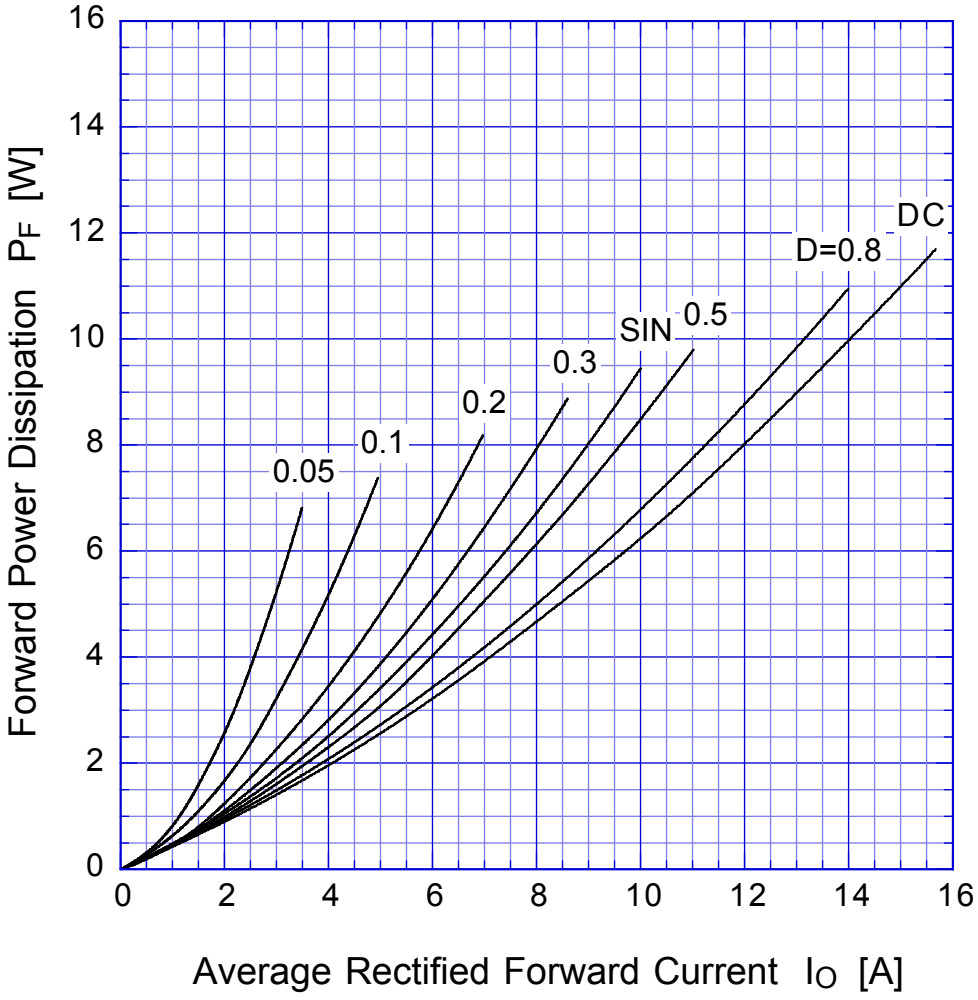
DF10SC9 Reverse Power Dissipation



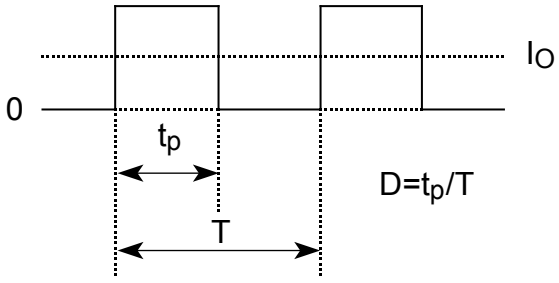
Tj = 150°C



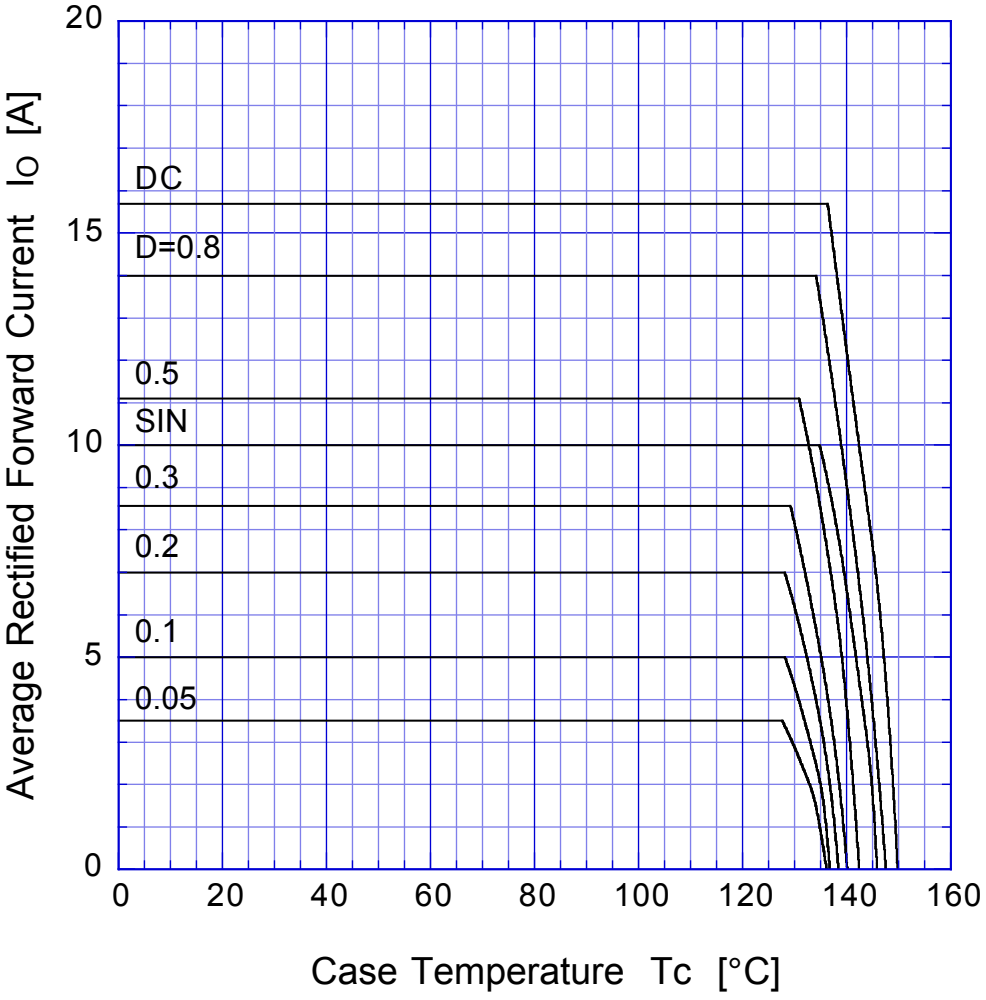
DF10SC9 Forward Power Dissipation



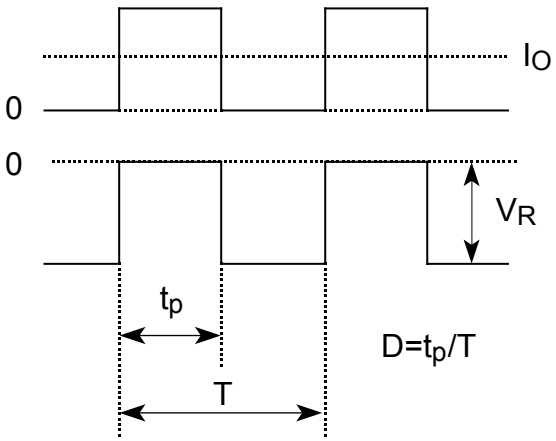
Tj = 150°C



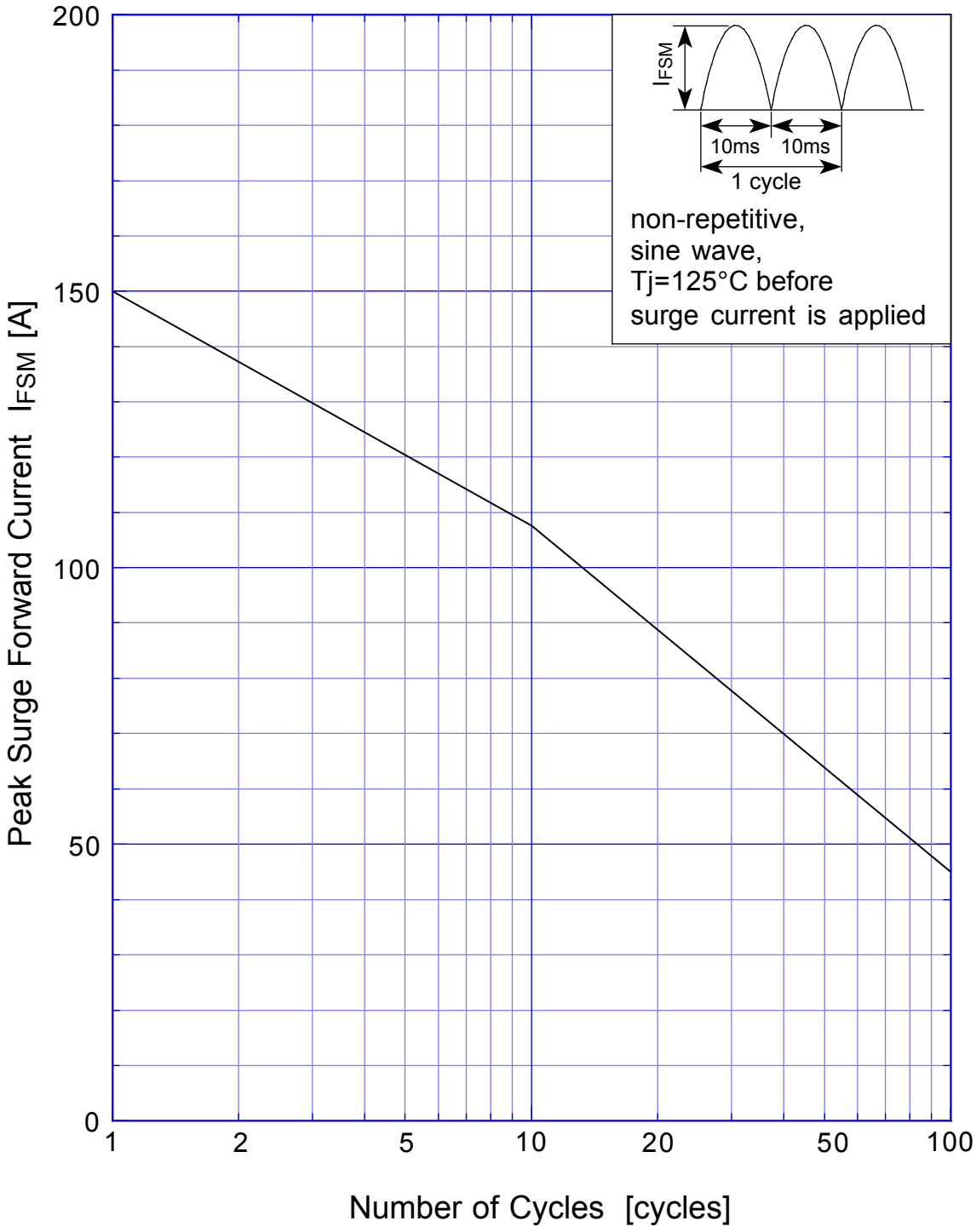
DF10SC9 Derating Curve



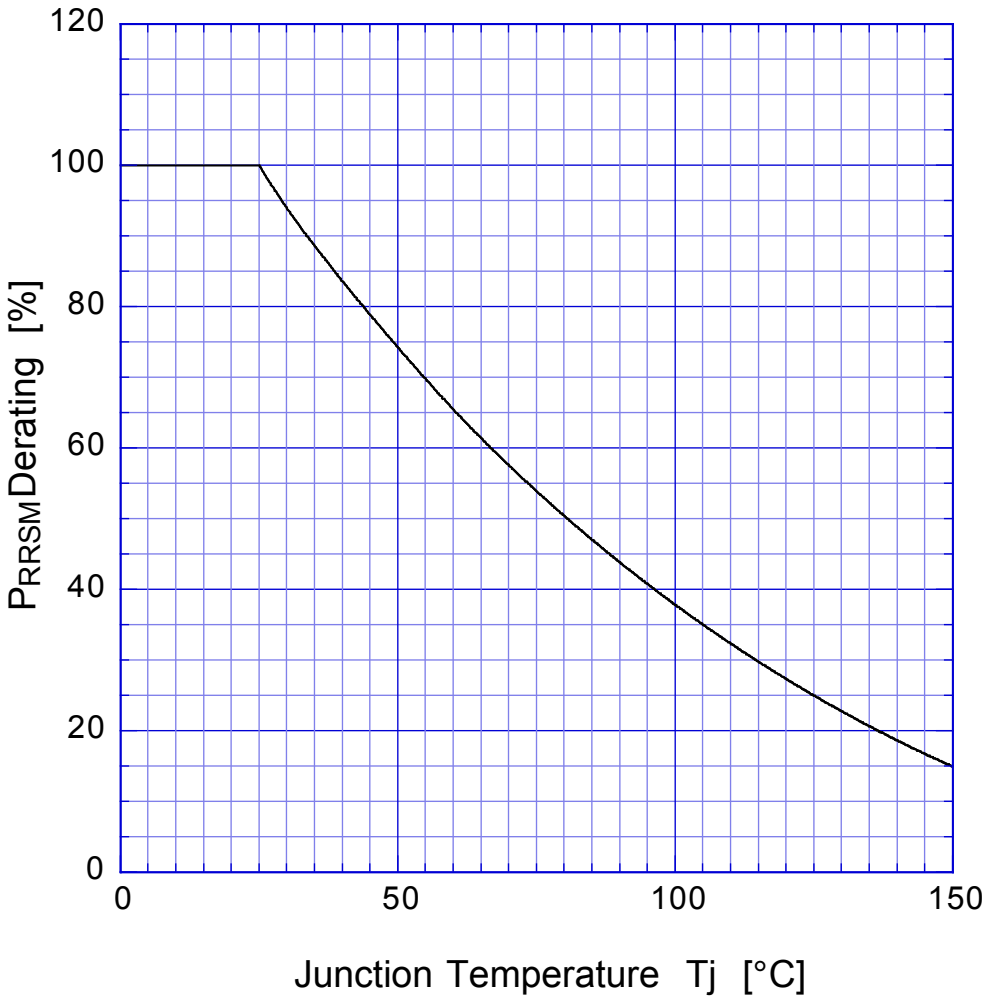
V_R = 45V

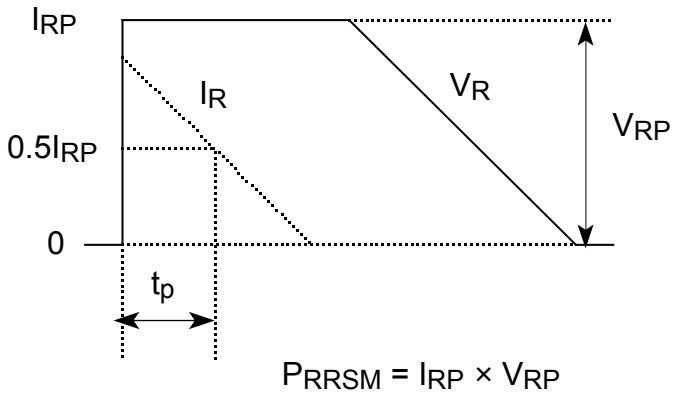


DF10SC9 Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve





SBD Repetitive Surge Reverse Power Capability

