SHINDENGEN

Super Fast Recovery Rectifiers

Single

SF8L60

600V 8A

FEATURES

- High Voltage
- trr70ns
- Fully Isolated Molding
- Dielectric strength 2kV guaranteed

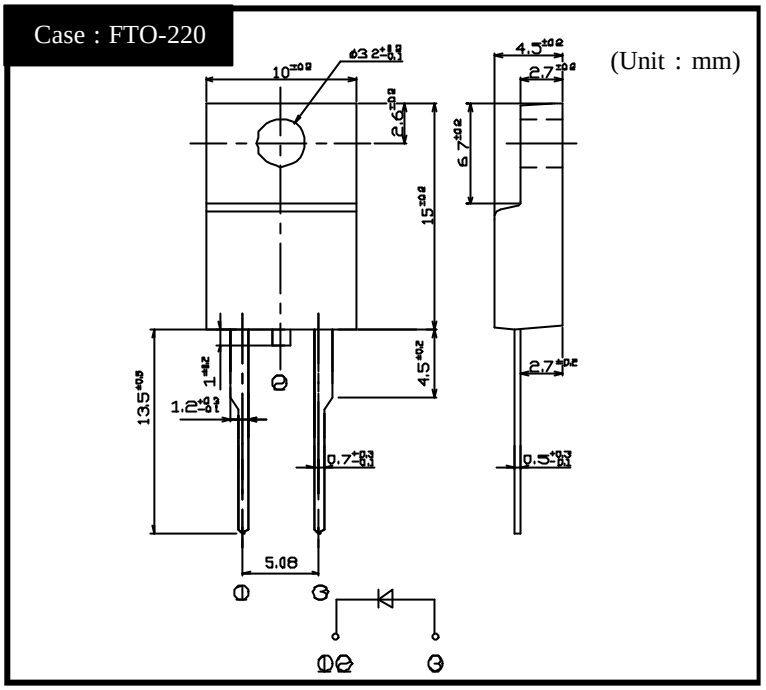
APPLICATION

- PFC
- Switching power supply
- Free Wheel
- CTV+B output, lighting

OUTLINE DIMENSIONS

Case : FTO-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}		600	V
Average Rectified Forward Current	Io	50Hz sine wave, R-load, Tc=118°C	8	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	170	A
Dielectric Strength	Vdis	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque :0.3N･m)	0.5	N･m

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

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	I_F=8A, Pulse measurement	Max.1.5	V
Reverse Current	I_R	V_R=V_{RM}, Pulse measurement	Max.25	μA
Reverse Recovery Time	trr	I_F=0.5A, I_R=1A	Max.70	ns
Thermal Resistance	θjc	junction to case	Max.2.5	°C/W

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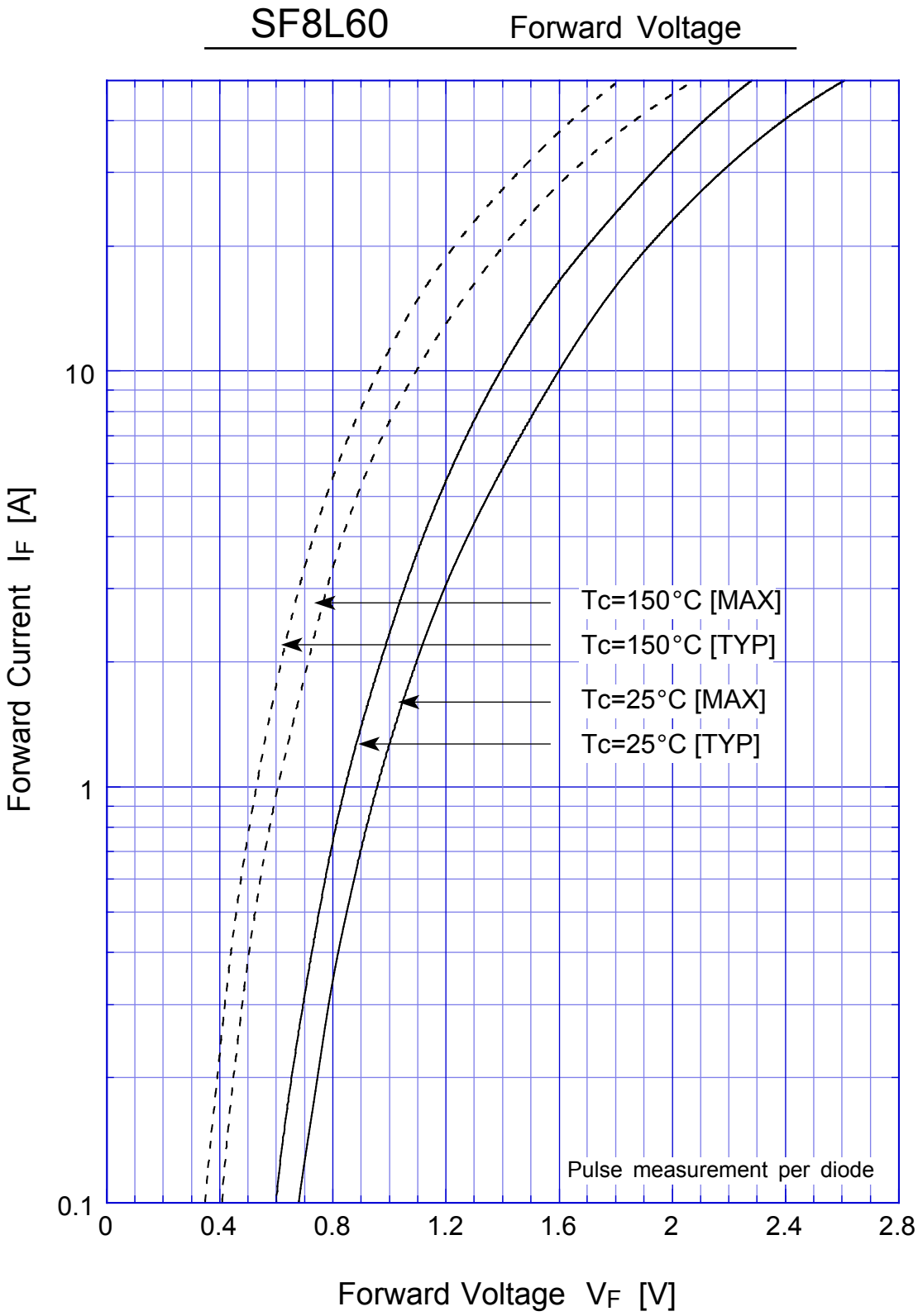
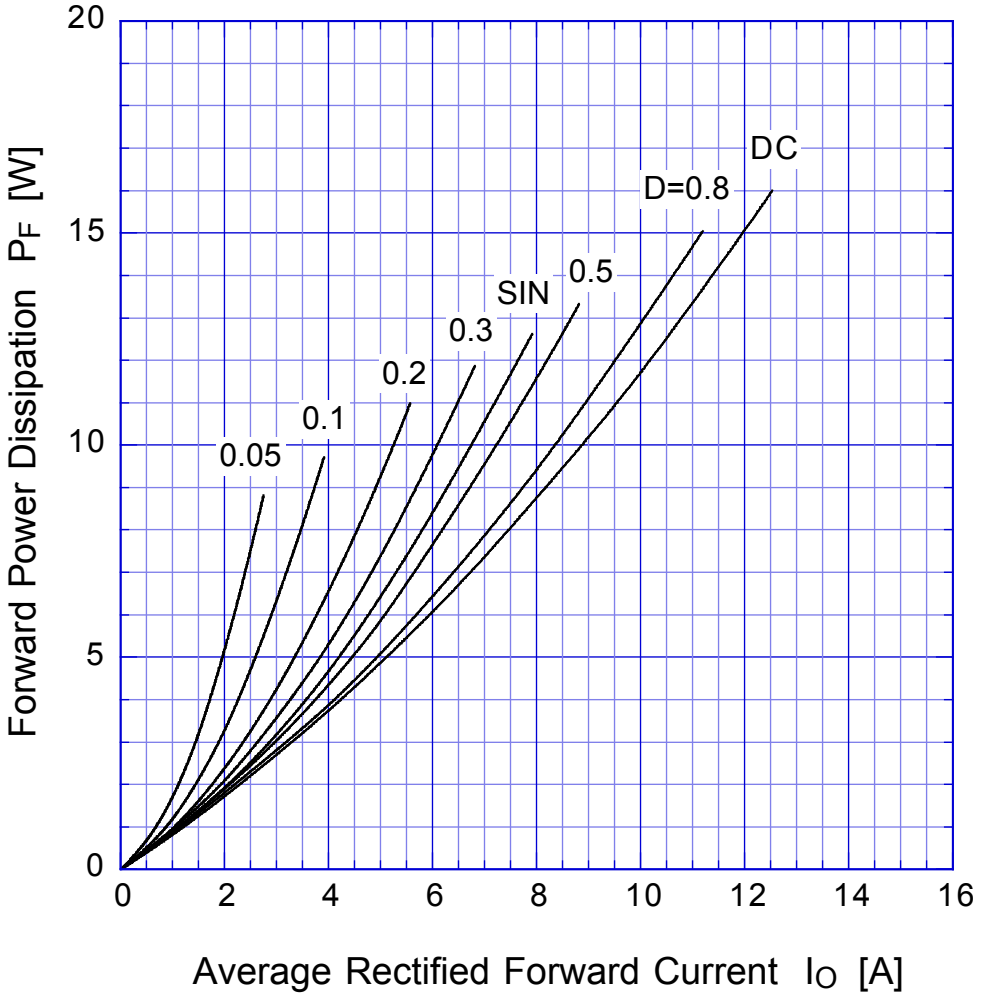
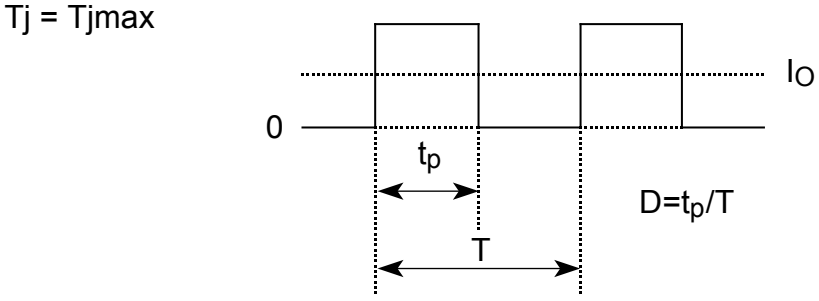
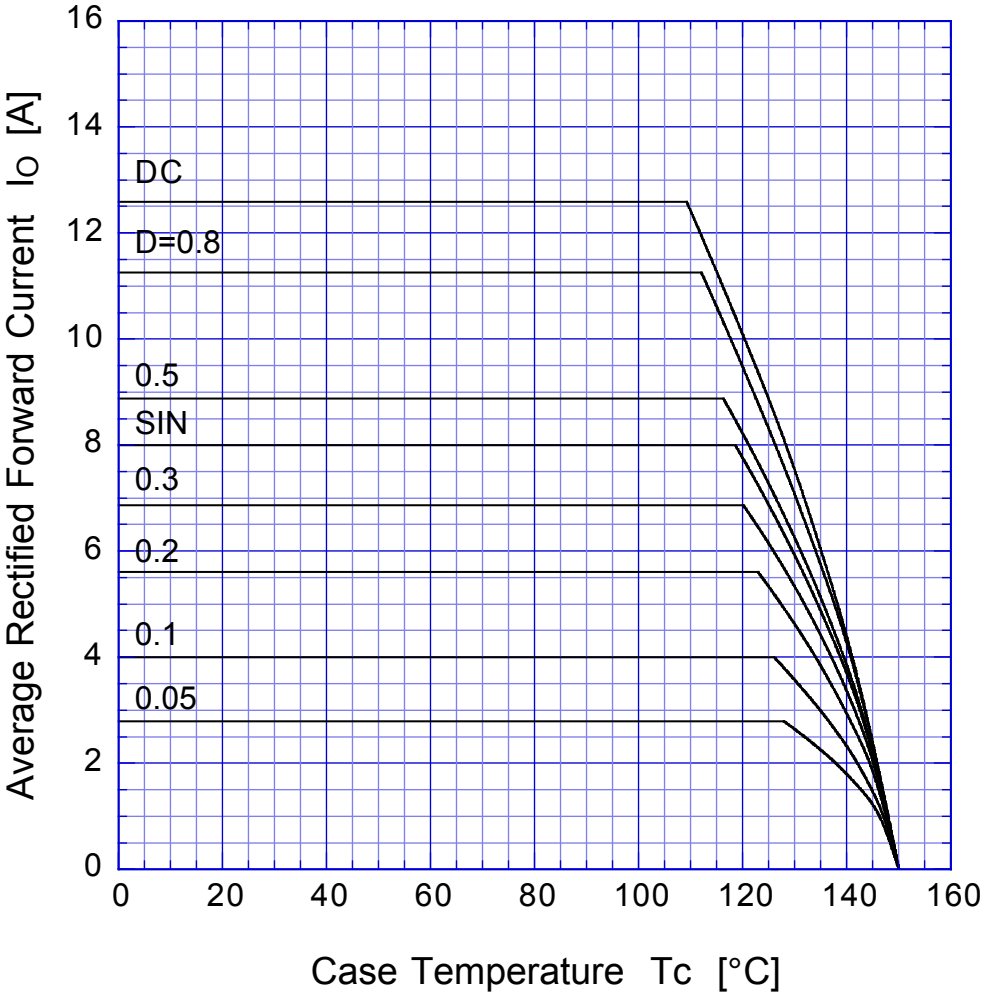

SF8L60
Forward Voltage
Forward Current IF [A]
10
1
0.1
0
0.4
0.8
1.2
1.6
2
2.4
2.8
Forward Voltage VF [V]
Tc=150°C [MAX]
Tc=150°C [TYP]
Tc=25°C [MAX]
Tc=25°C [TYP]
Pulse measurement per diode

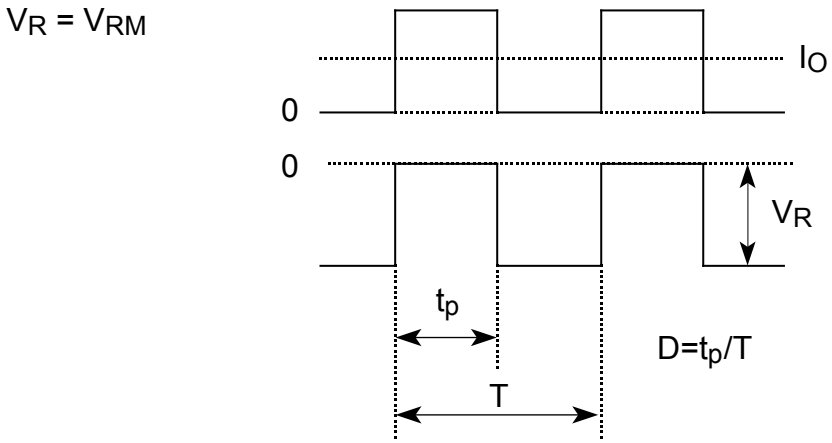
SF8L60 Forward Power Dissipation



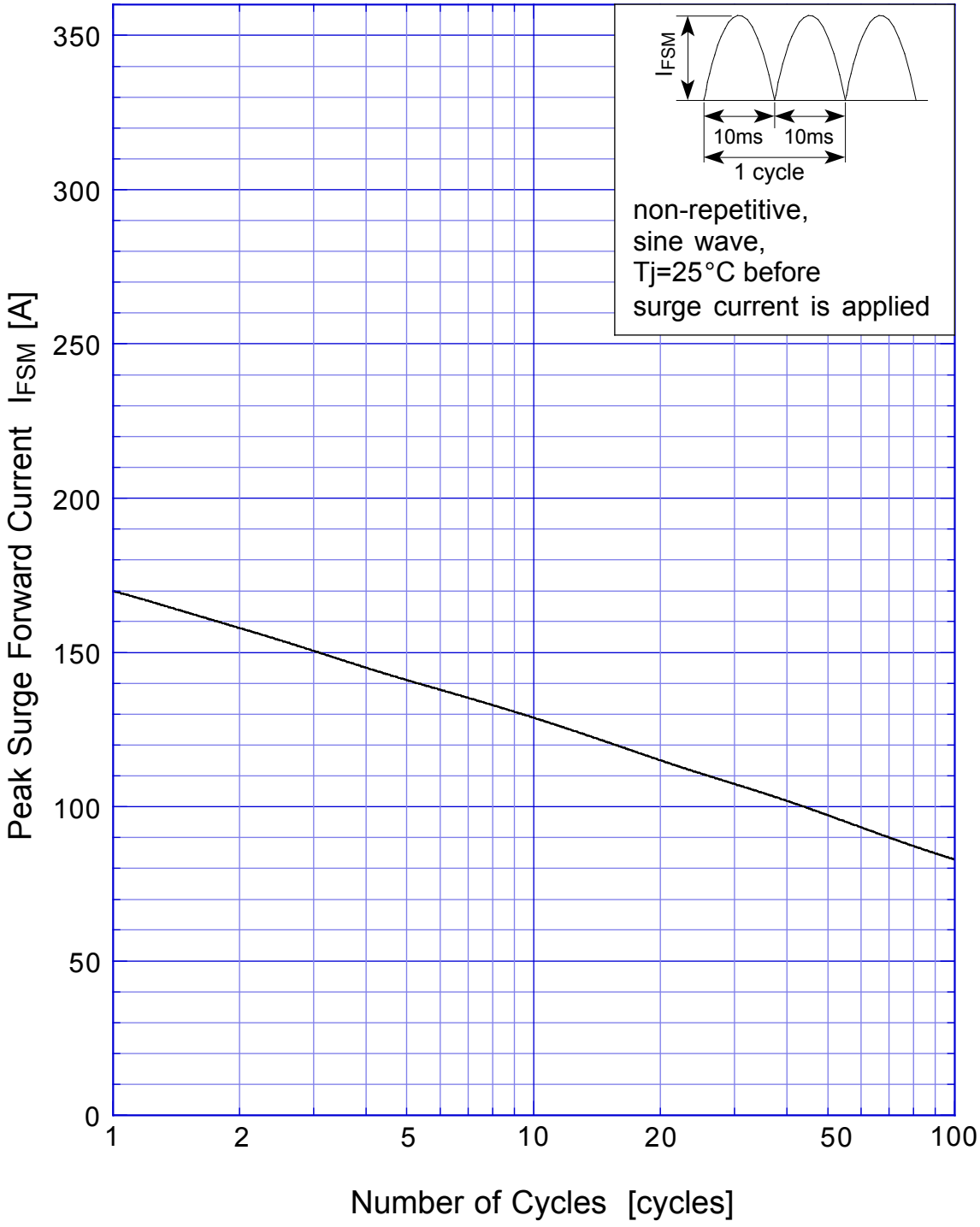


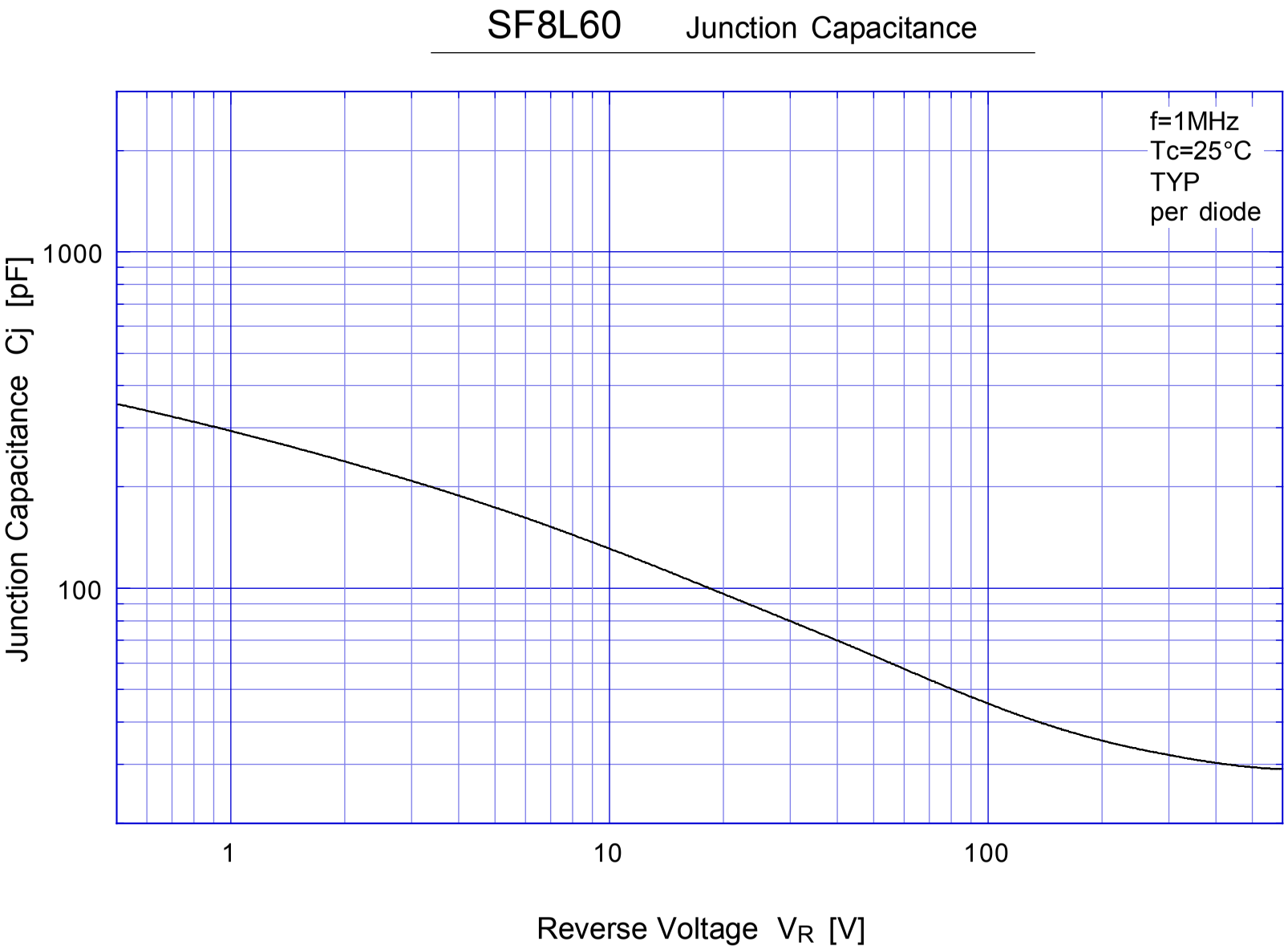
SF8L60 Derating Curve





SF8L60 Peak Surge Forward Capability




SF8L60 Junction Capacitance
f=1MHz
Tc=25°C
TYP
per diode
Junction Capacitance Cj [pF]
1000
100
1
10
100
Reverse Voltage VR [V]