SHINDENGEN

Super Fast Recovery Rectifiers

Single

S2L40

400V 1.1A

FEATURES

- Low noise
- trr50ns
- Applicable to Automatic Insertion

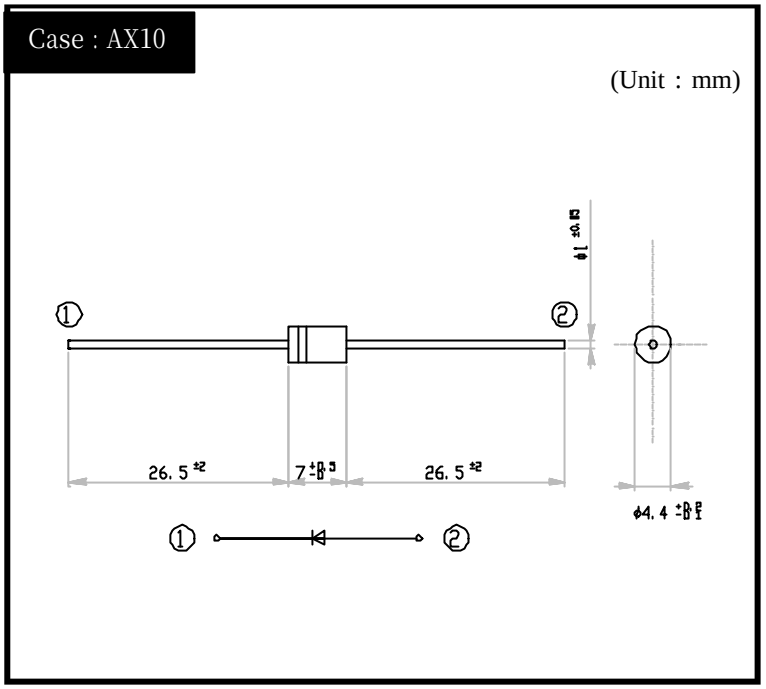
APPLICATION

- Switching power supply
- Free Wheel
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

OUTLINE DIMENSIONS

Case : AX10

(Unit : mm)



RATINGS

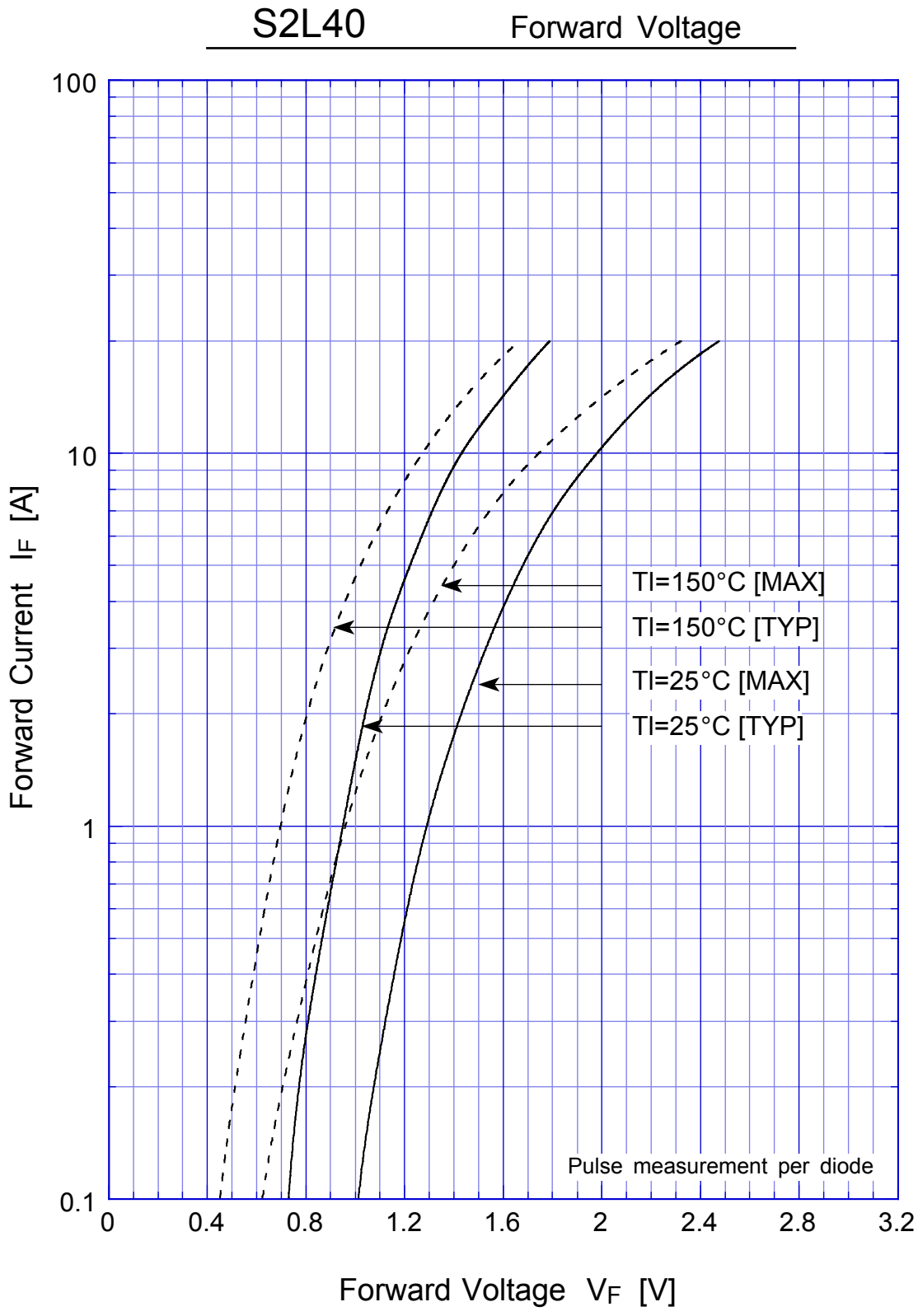
●Absolute Maximum Ratings (If not specified Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55～150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V_{RM}		400	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, Ta=25°C	1.1	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	40	A

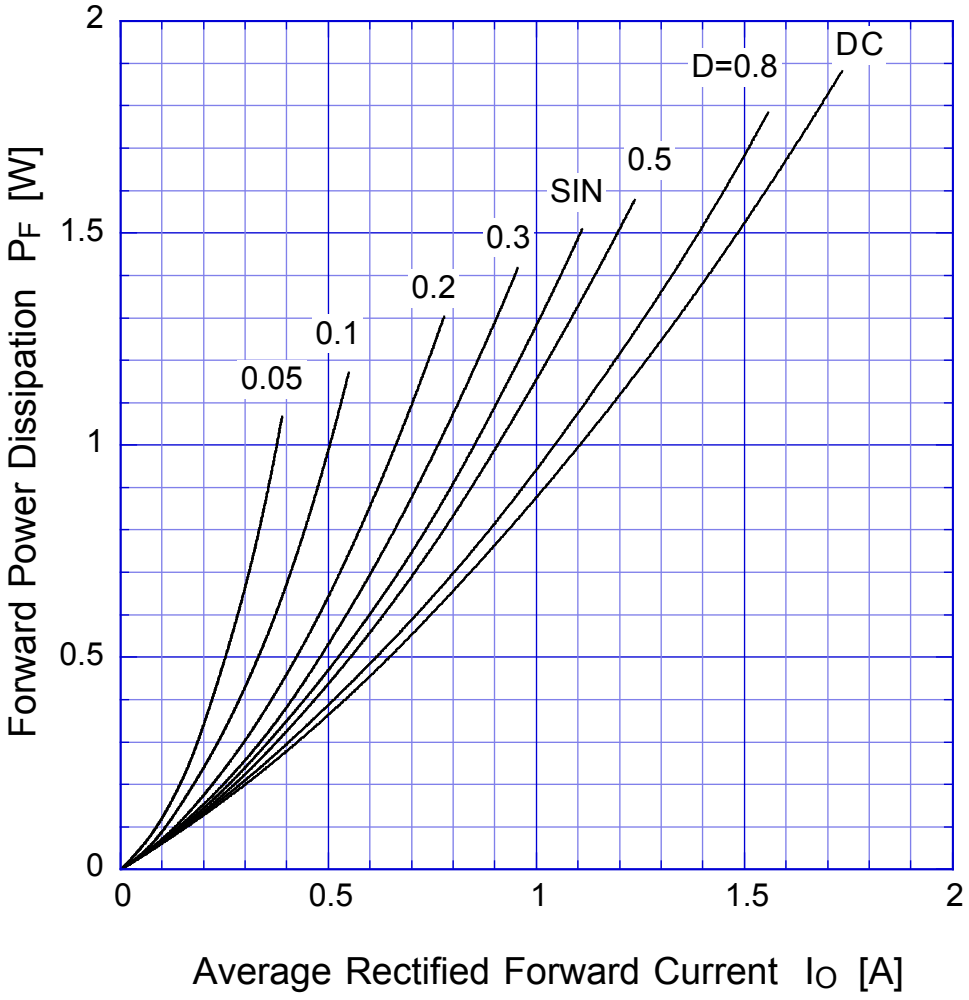
●Electrical Characteristics (If not specified Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	I_F=1.1A, Pulse measurement	Max.1.3	V
Reverse Current	I_R	V_R=V_{RM}, Pulse measurement	Max.10	μA
Reverse Recovery Time	trr	I_F=0.5A, I_R=1A	Max.50	ns
Thermal Resistance	θjl	junction to lead	Max.12	°C/W
	θja	junction to ambient	Max.83	

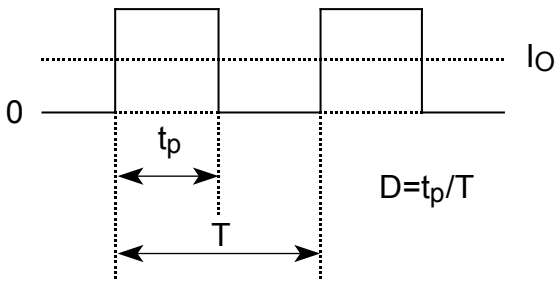
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S2L40
Forward Voltage
100
10
1
0.1
0
0.4
0.8
1.2
1.6
2
2.4
2.8
3.2
Forward Current IF [A]
Forward Voltage VF [V]
Tl=150°C [MAX]
Tl=150°C [TYP]
Tl=25°C [MAX]
Tl=25°C [TYP]
Pulse measurement per diode

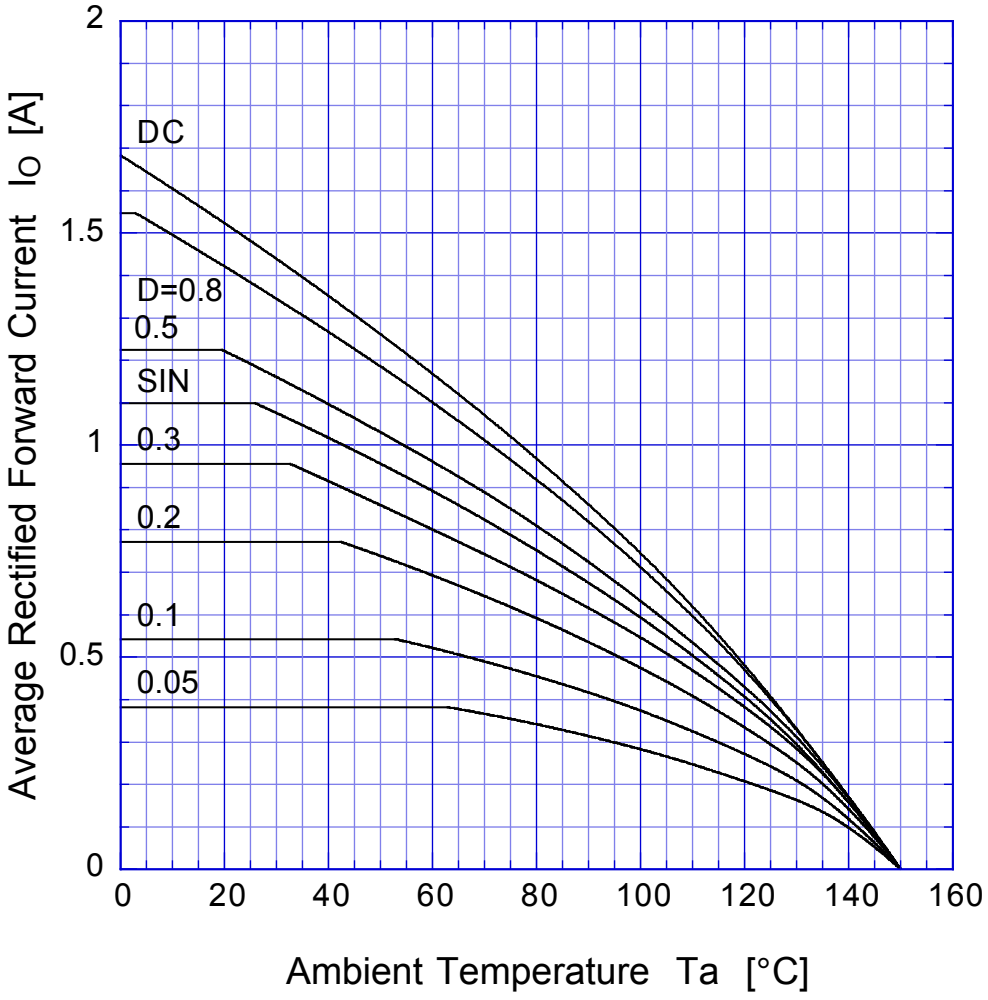
S2L40 Forward Power Dissipation

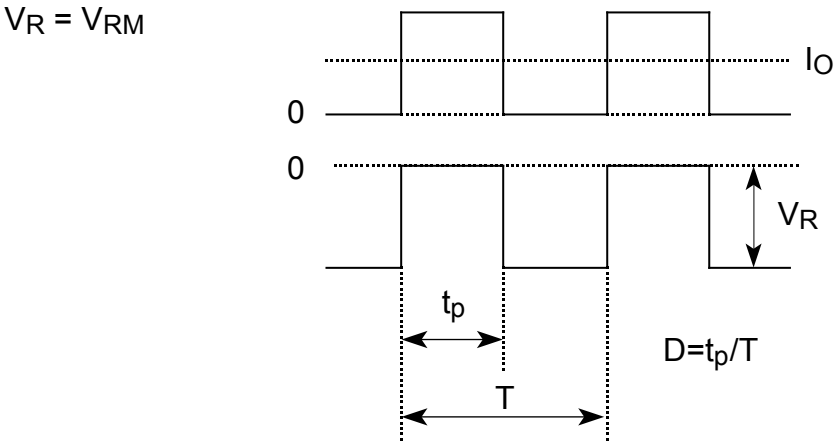


Tj = Tjmax

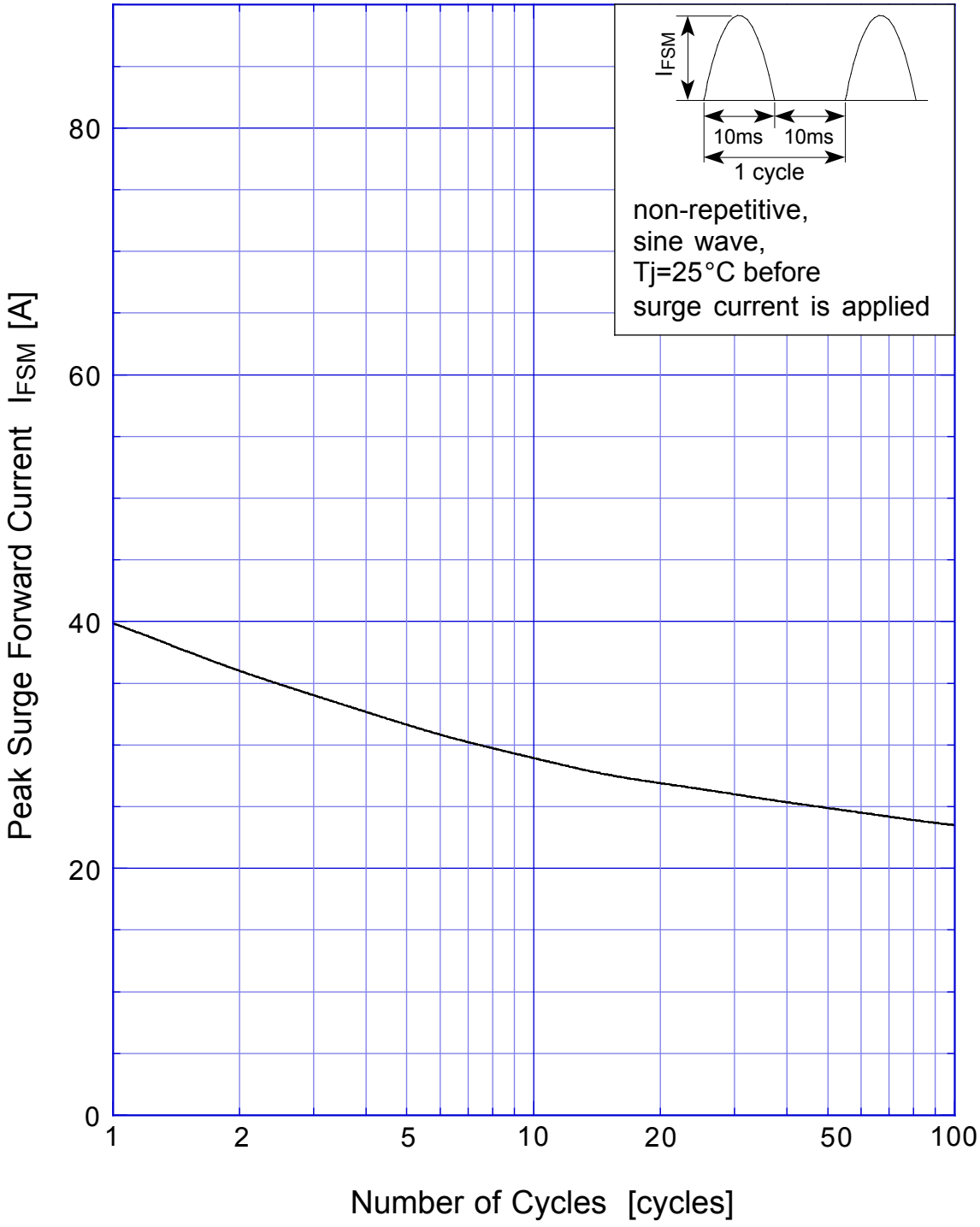


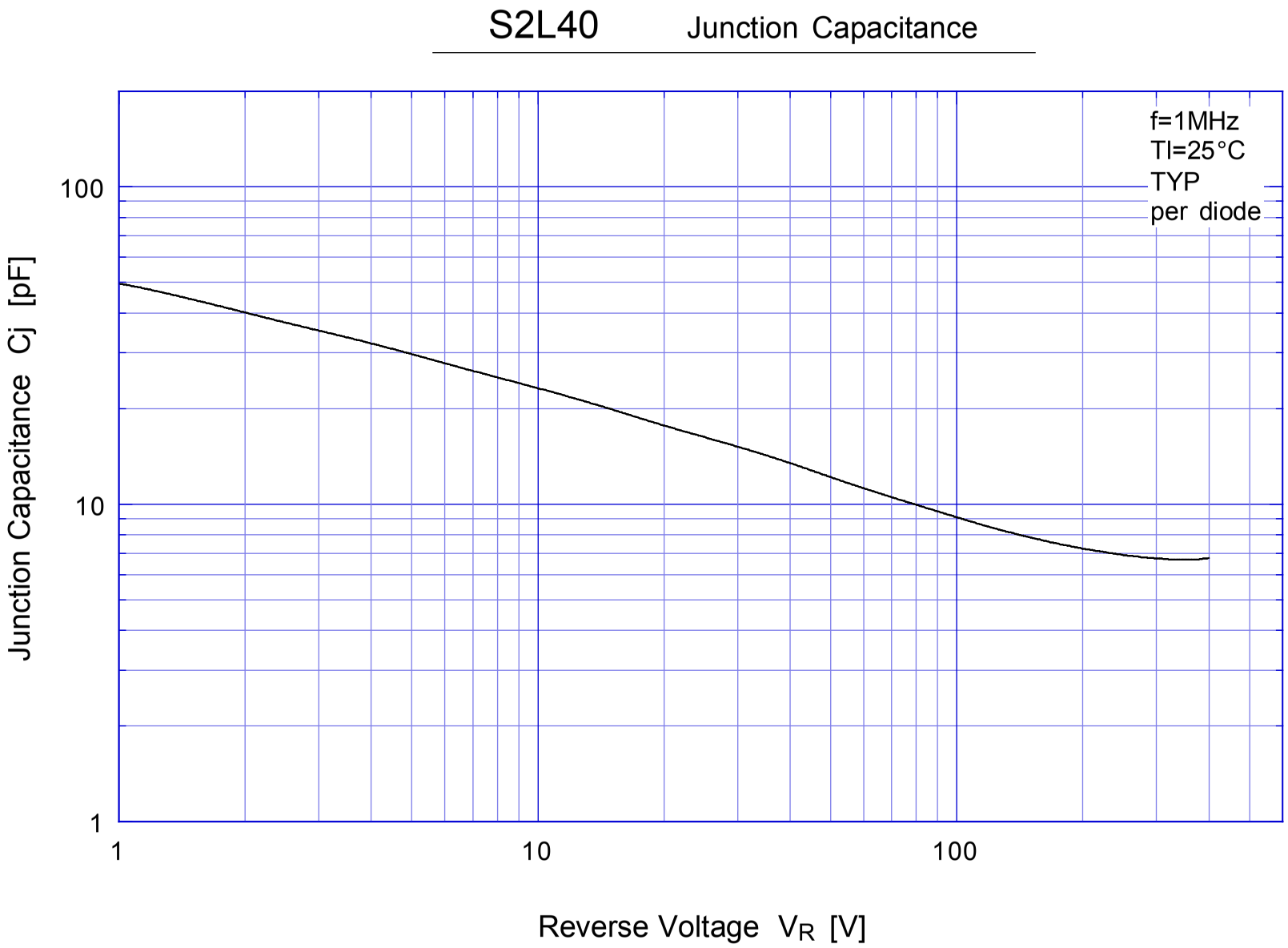
S2L40 Derating Curve





S2L40 Peak Surge Forward Capability




S2L40
Junction Capacitance
f=1MHz
Tl=25°C
TYP
per diode
100
10
1
Junction Capacitance Cj [pF]
1
10
100
Reverse Voltage VR [V]