

SHINDENGEN

Super Fast Recovery Rectifiers

Single

M1FL20U

200V 1.1A

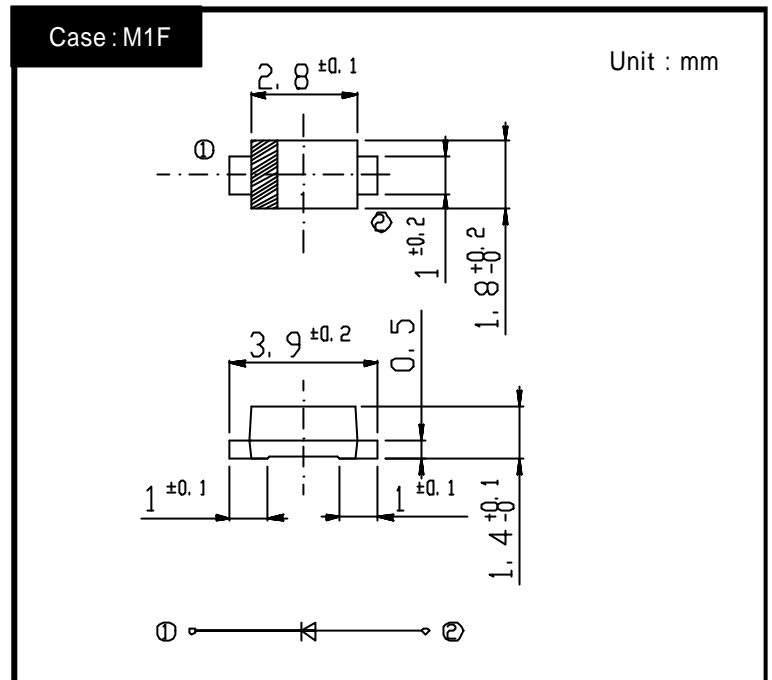
FEATURES

Small SMT
Low noise
trr35ns

APPLICATION

Switching power supply
DC/DC converter
Free Wheel
Home Appliances, Office Equipment
Telecommunication, Factory Automation

OUTLINE DIMENSIONS



RATINGS

Absolute Maximum Ratings (If not specified Tl=25)

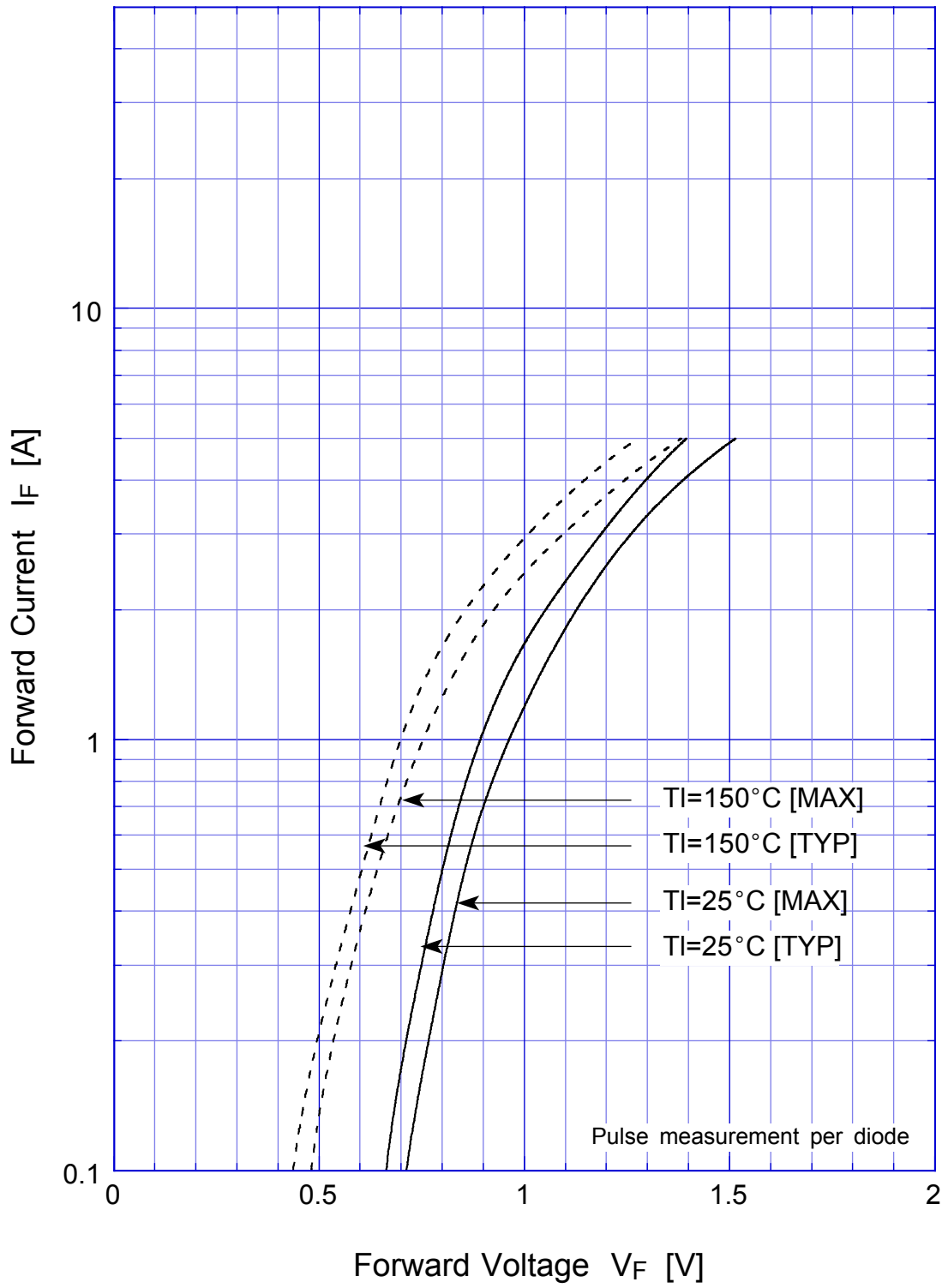
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V _{RM}		200	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, Ta=25 On alumina substrate	1.1	A
		50Hz sine wave, R-load, Ta=25 On glass-epoxy substrate	0.75	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25	30	A

Electrical Characteristics (If not specified Tl=25)

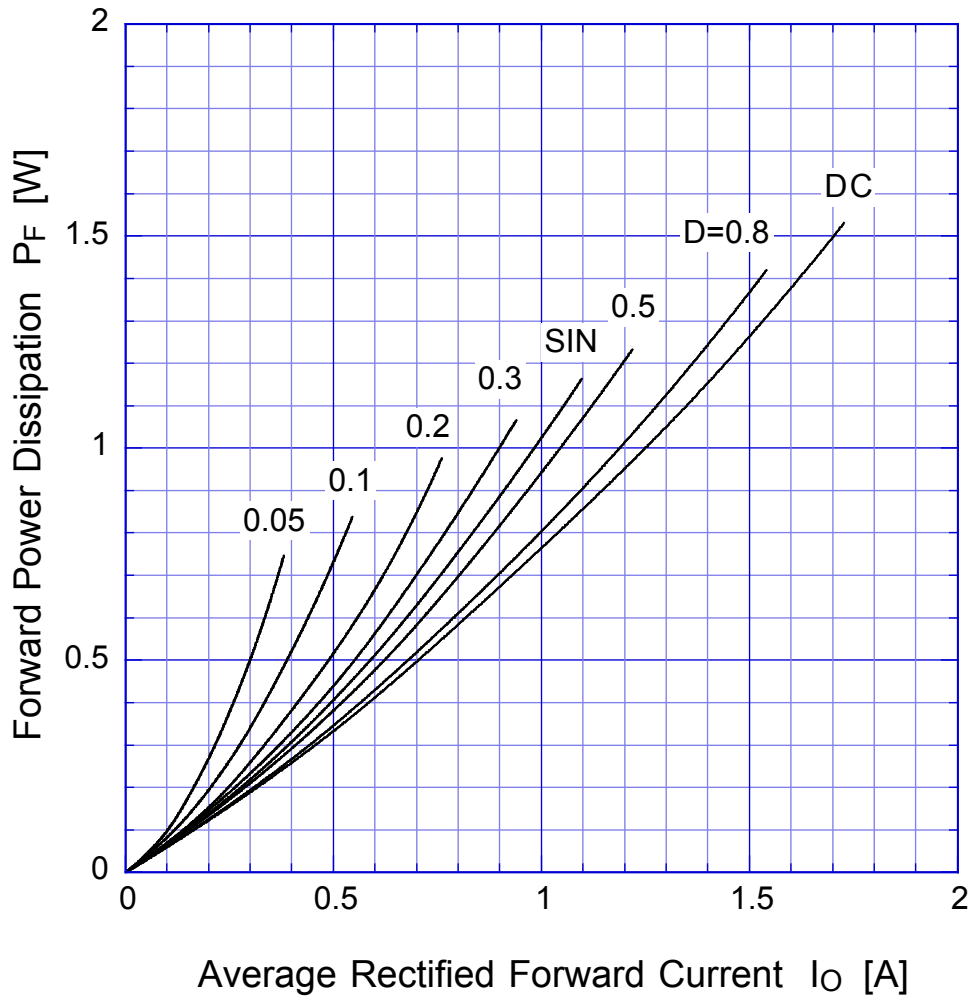
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =1.1A, Pulse measurement	Max.0.98	V
Reverse Current	I _R	V _R =200V, Pulse measurement	Max.10	μA
Reverse Recovery Time	trr	I _F =0.5A, I _R =1A	Max.35	ns
		junction to lead	Max.20	
Thermal Resistance	ja	junction to ambient On alumina substrate	Max.108	/W
		junction to ambient On glass-epoxy substrate	Max.186	

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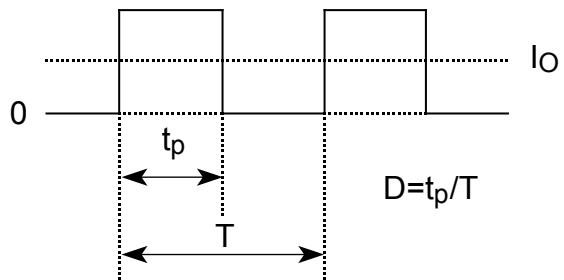
Forward Voltage



M1FL20U Forward Power Dissipation

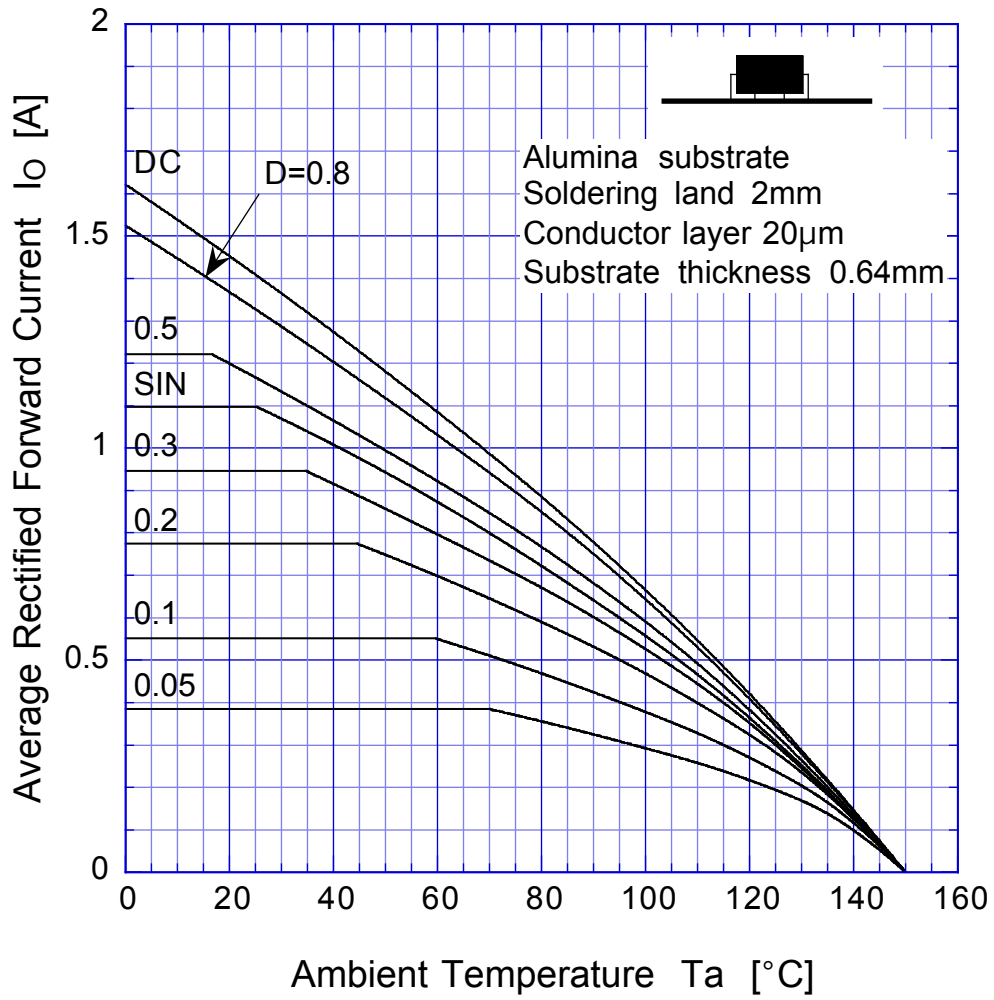


$T_j = 150^\circ\text{C}$

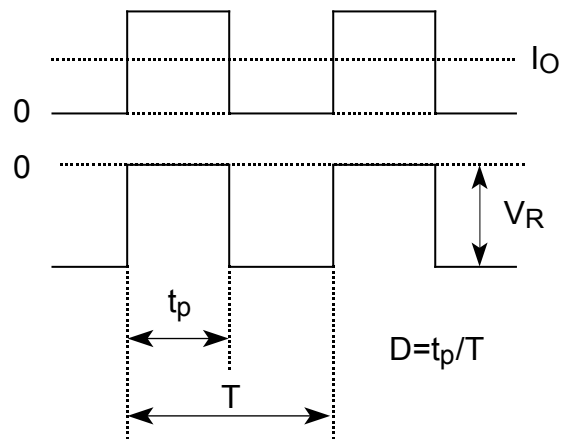


M1FL20U

Derating Curve

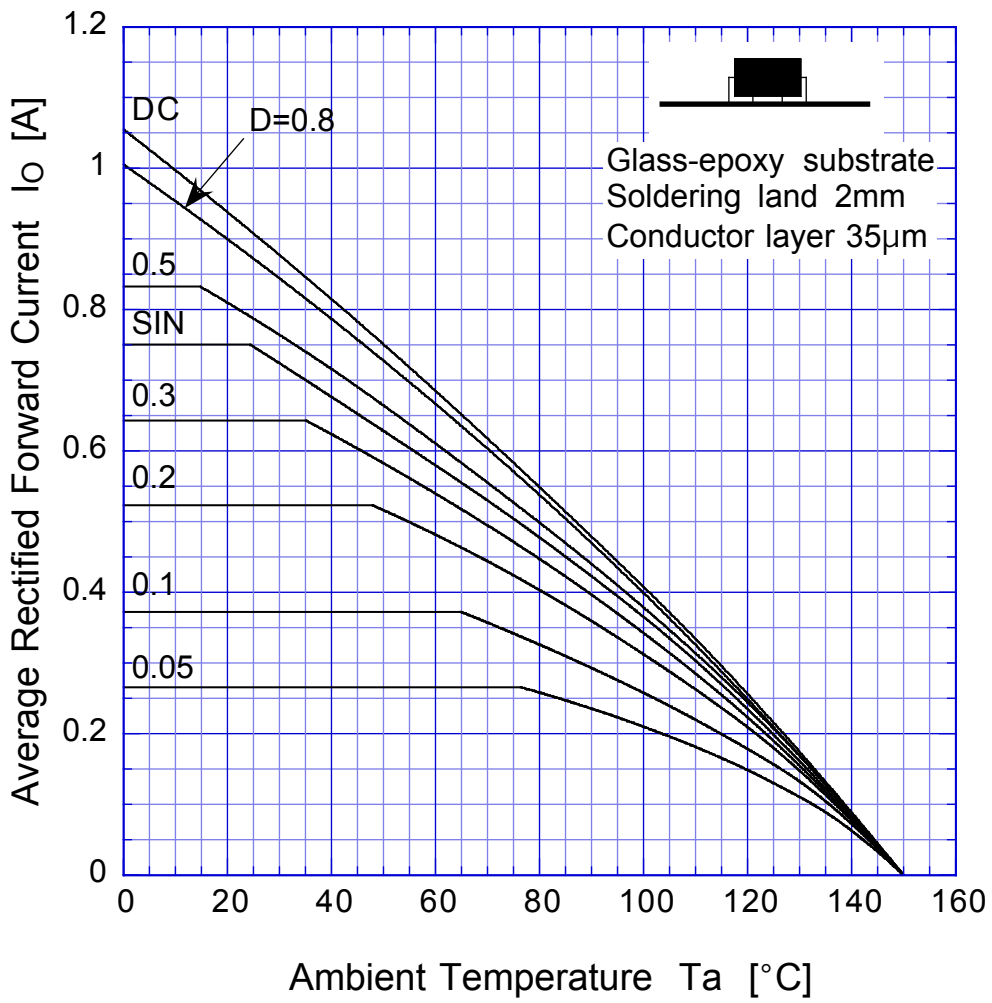


$$V_R = V_{RM}$$



M1FL20U

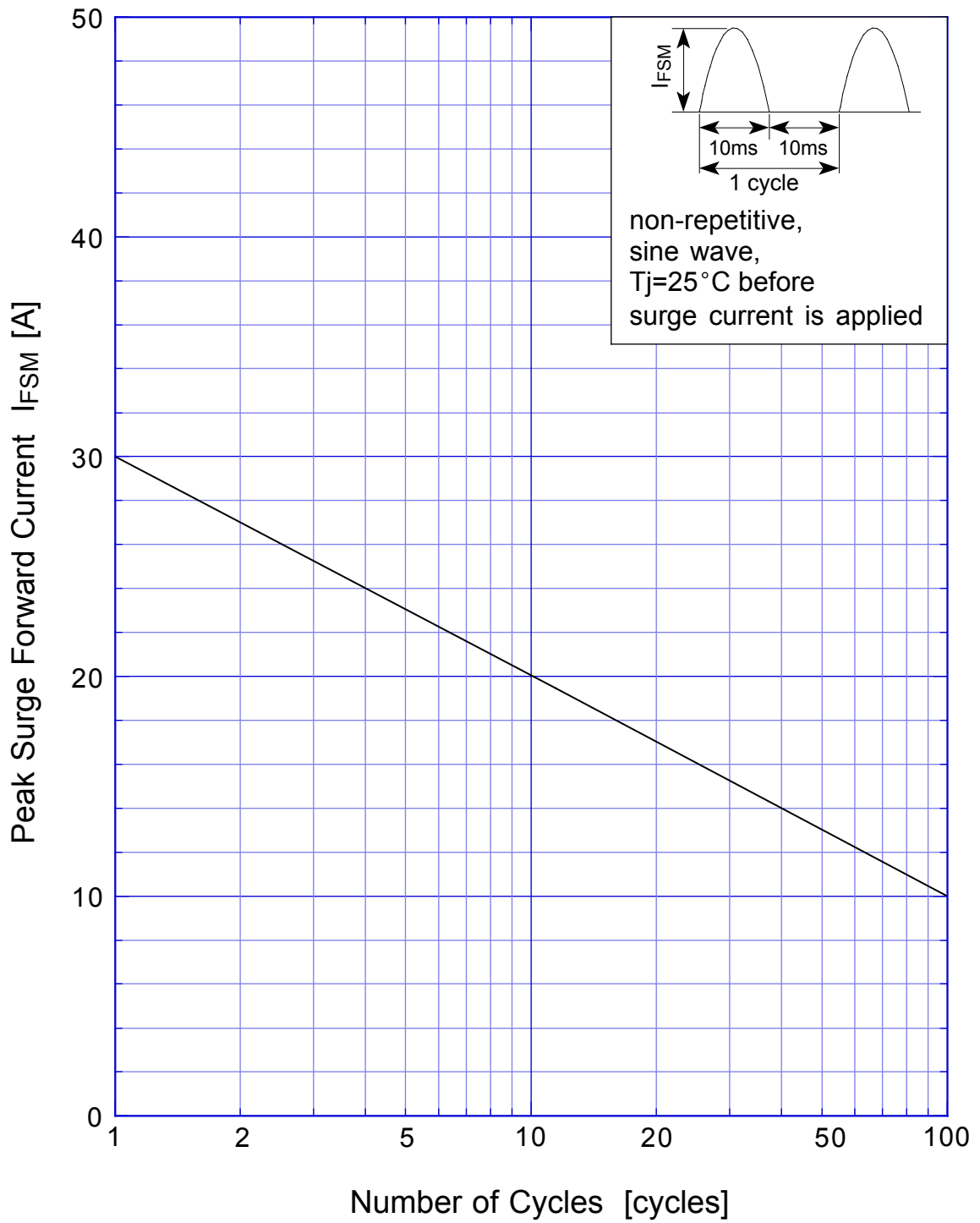
Derating Curve



$$V_R = V_{RM}$$



M1FL20U Peak Surge Forward Capability



M1FL20U Junction Capacitance

