

FDRP12S120J(1200V, 12A)

FUJI Diode

Soft Recovery FRD Series

■ Maximum Rating and Characteristics

● Maximum Ratings (at $T_a=25^{\circ}\text{C}$ unless otherwise specified.)

Item	Symbol	Conditions	Ratings	Units
Repetitive peak reverse voltage	V_{RRM}	—	1200	V
Average forward current	I_{FAV}	50Hz Square wave duty = 1/2 $T_c = 100^{\circ}\text{C}$	12	A
Non-repetitive forward surge current	I_{FSM}	Sine wave, 10ms 1shot	100	A
Operating junction temperature	T_j	—	+150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	—	-40~+150	$^{\circ}\text{C}$

● Electrical Characteristics (at $T_a=25^{\circ}\text{C}$ unless otherwise specified.)

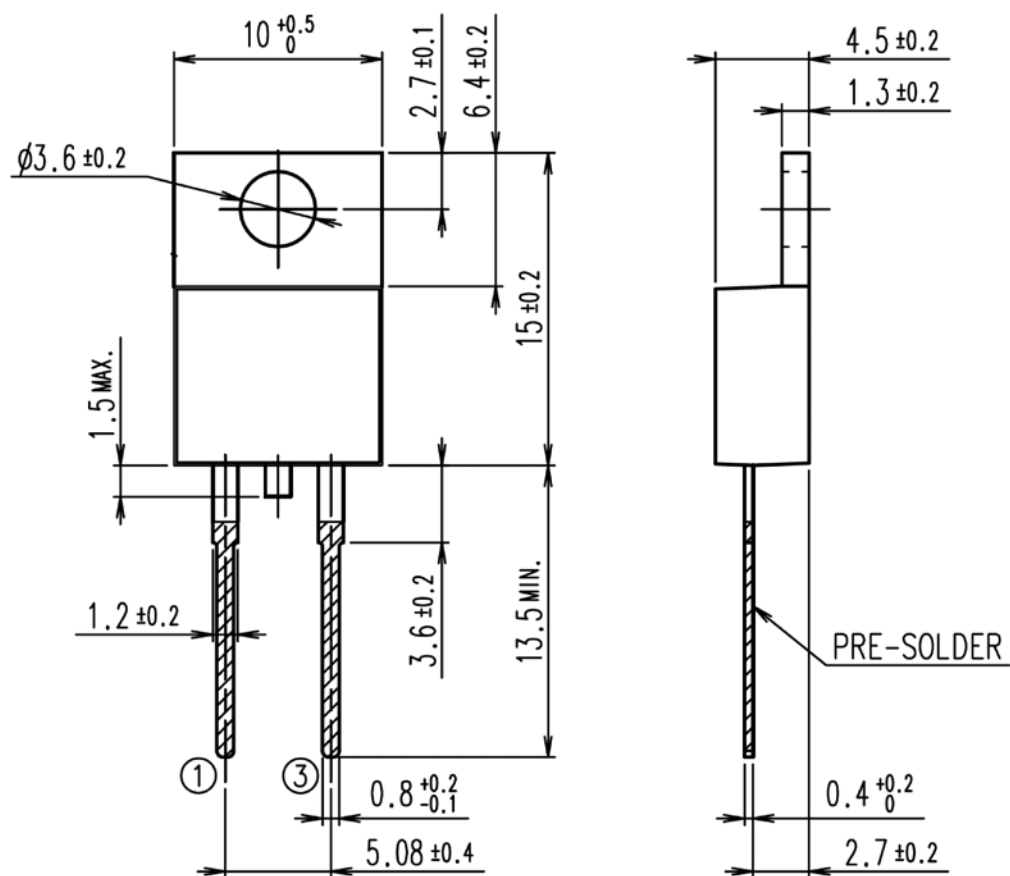
Item	Symbol	Conditions	Maximum	Units
Forward voltage	V_F	$I_F = 12\text{A}$	2.8	V
Reverse current	I_R	$V_R = V_{RRM}$	250	μA
Reverse recovery time	t_{rr}	$V_R=30\text{V}, I_F = 1.2\text{A}$ $-di/dt=200\text{A}/\mu\text{s}$	0.042	μs
Thermal resistance	$R_{th(j-c)}$	Junction to case	1.5	$^{\circ}\text{C}/\text{W}$

● Mechanical Characteristics

Item	Conditions	Maximum	Units
Mounting torque	Recommended torque	0.3~0.5	N·m
Approximate mass	—	2.0	g

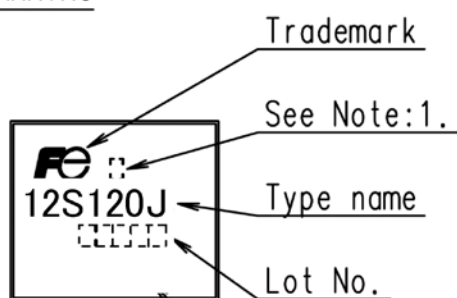
■ Outline Drawings, mm
TO-220

OUT VIEW



DIMENSIONS ARE IN MILLIMETERS.

MARKING



CONNECTION



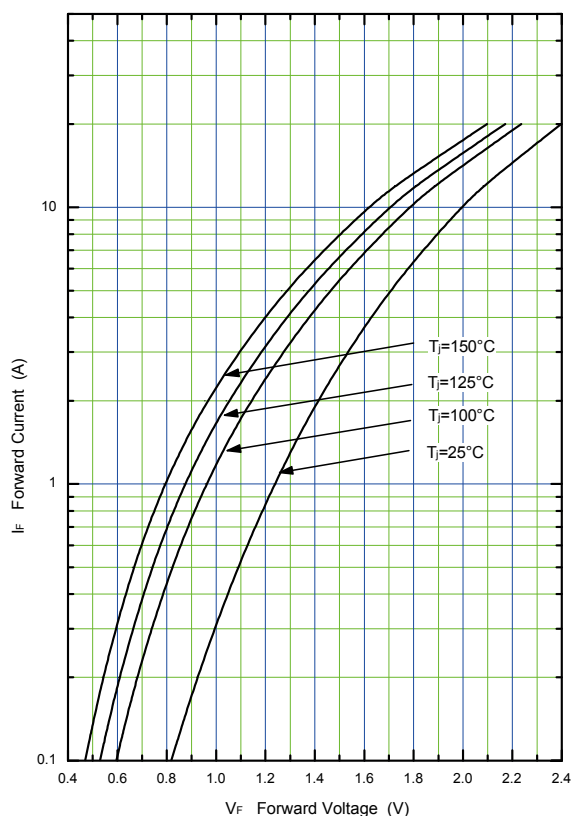
Note:1.

Country of origin mark.

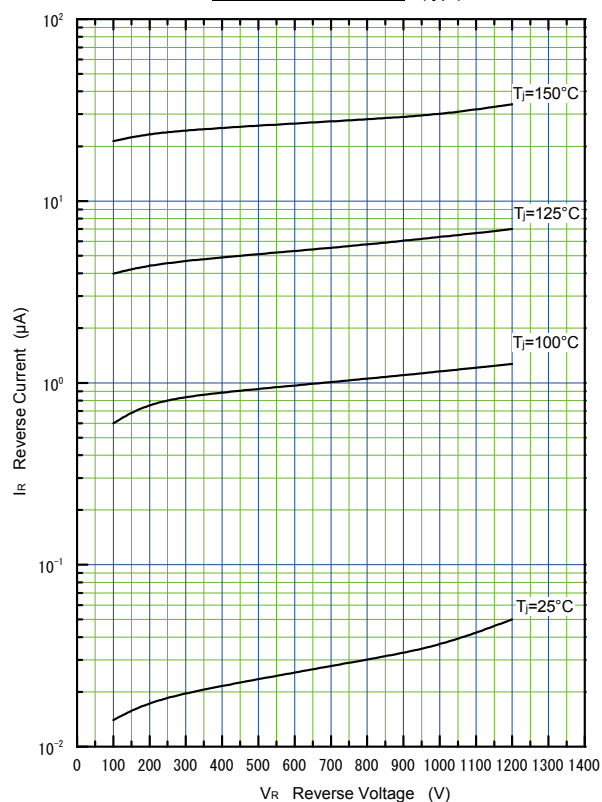
『P』 is Made in PHILIPPINES.

■ Characteristics (Representative)

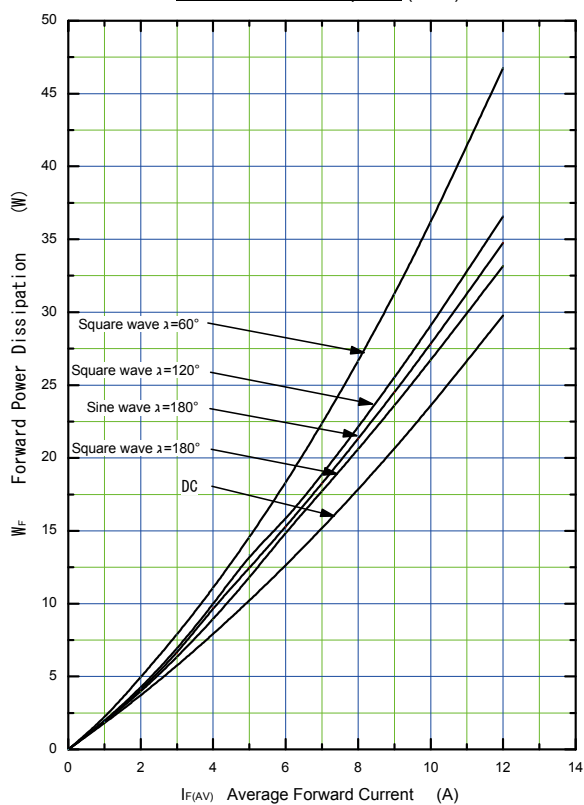
Forward Characteristic (typ.)



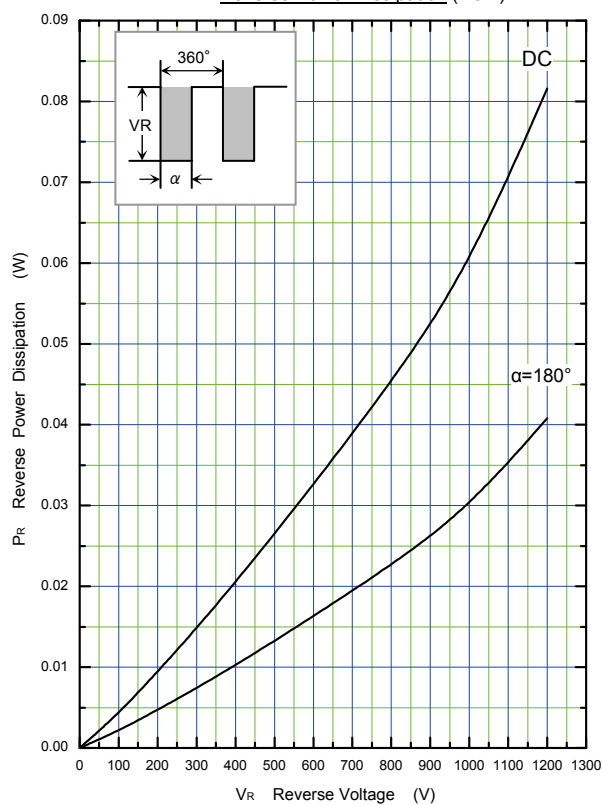
Reverse Characteristic (typ.)

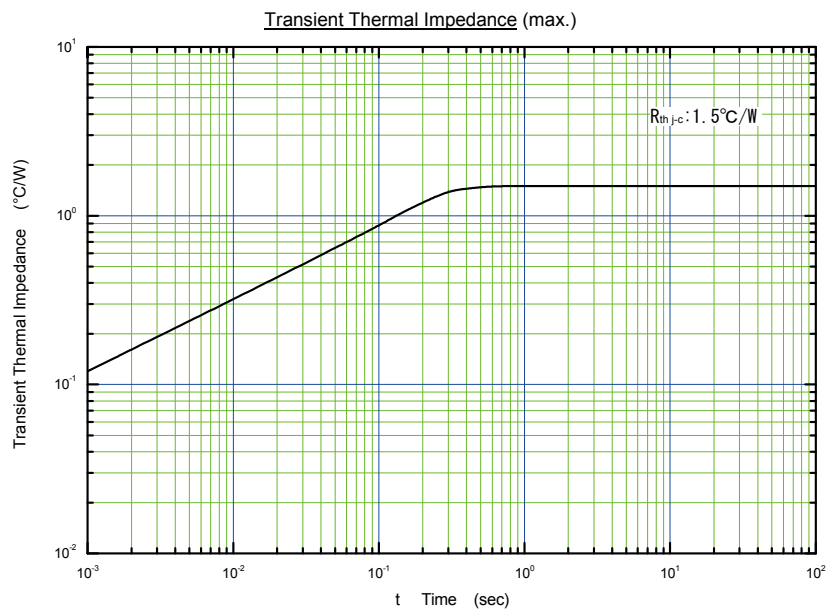
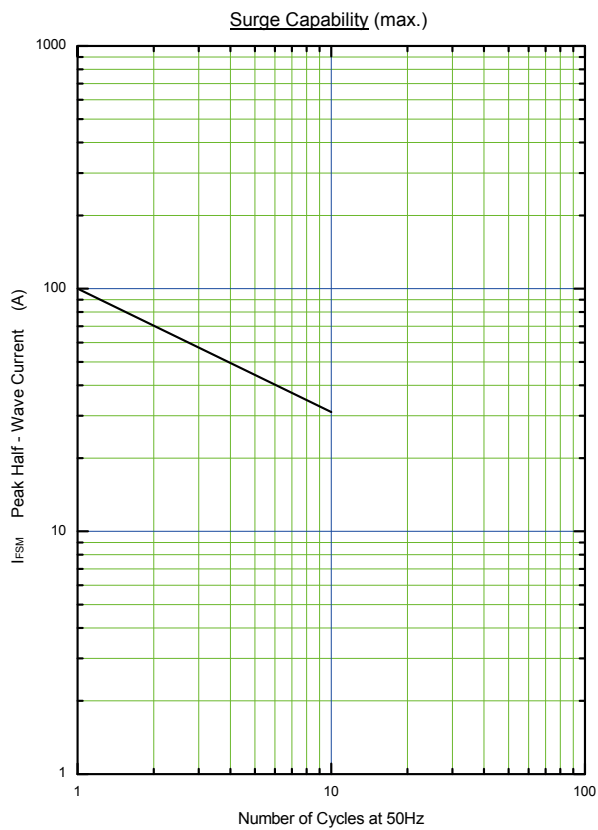
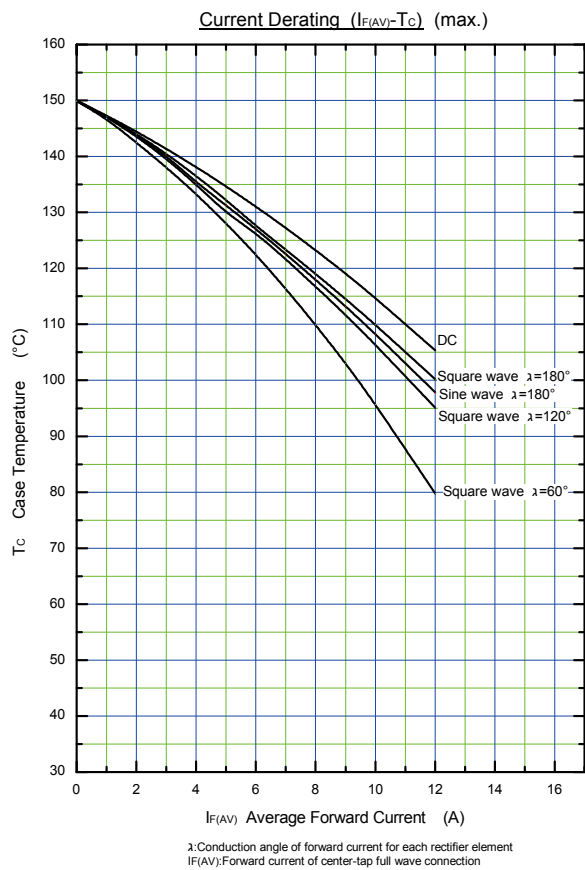


Forward Power Dissipation (max.)



Reverse Power Dissipation (max.)





WARNING

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• Computers	• OA equipment	• Communications equipment (terminal devices)	• Measurement equipment
• Machine tools	• Audiovisual equipment	• Electrical home appliances	• Personal equipment
			• Industrial robots etc.
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• Emergency equipment for responding to disasters and anti-burglary devices	• Safety devices
• Medical equipment	
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• Submarine repeater equipment		
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