

# D120SC6M

**Schottky Barrier Diodes  
60V, 120A**

## Feature

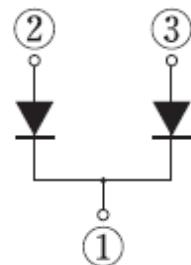
- High Io Rating Module Package
- High Recovery Speed
- Pb free terminal
- RoHS:Yes

## OUTLINE

Package (House Name): Module



## Equivalent circuit



## Absolute Maximum Ratings (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-40 to 125	°C
Junction temperature	Tj		125	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		60	V
Repetitive peak surge reverse voltage	V <sub>RRSM</sub>	Pulse width 100ns, duty=1/100	65	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, Rating for each arm I <sub>F(AV)</sub> /2, Tc=85°C	120	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive, 1cycle, Peak value, per arm, Tj=125°C	800	A
Mounting torque	T <sub>OR</sub>		1.7	N·m

※ :See the original Specifications

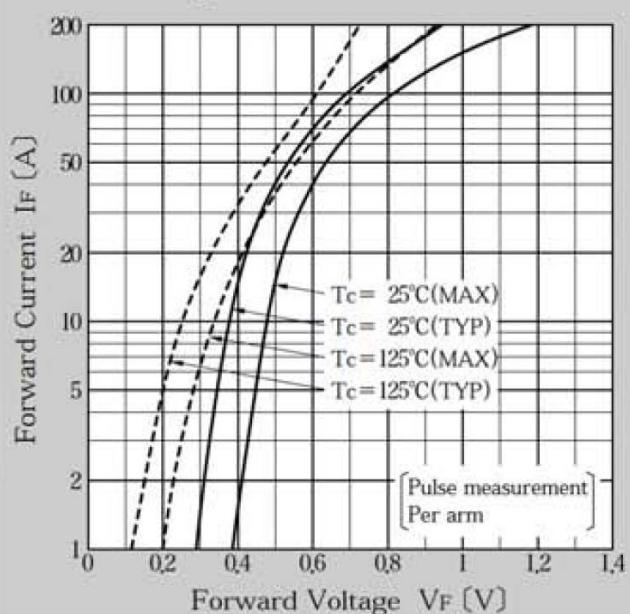
**Electrical Characteristics** (unless otherwise specified :  $T_c=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	$IF=60\text{A}$ , Pulse measurement, per arm			0.67	V
Reverse current	$I_R$	$VR=60\text{V}$ , Pulse measurement, per arm			40	mA
Total capacitance	$C_t$	$f=1\text{MHz}$ , $VR=10\text{V}$ , per arm		2200		pF
Thermal resistance	$R_{th(j-c)}$	Junction to case			0.34	$^\circ\text{C/W}$

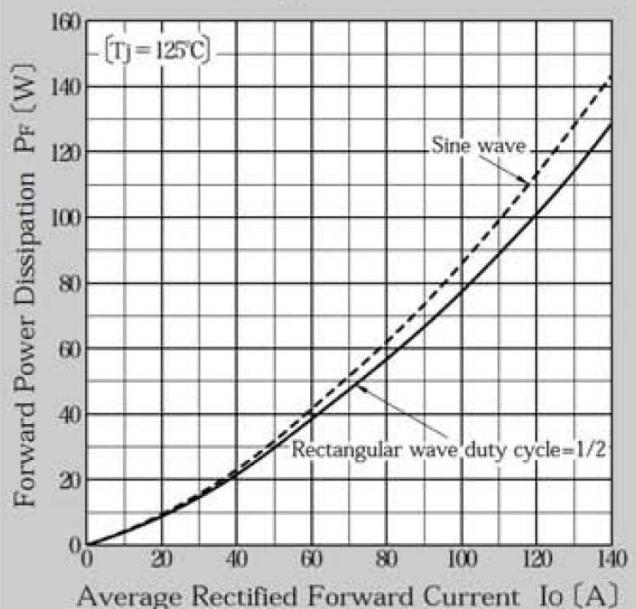
※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS

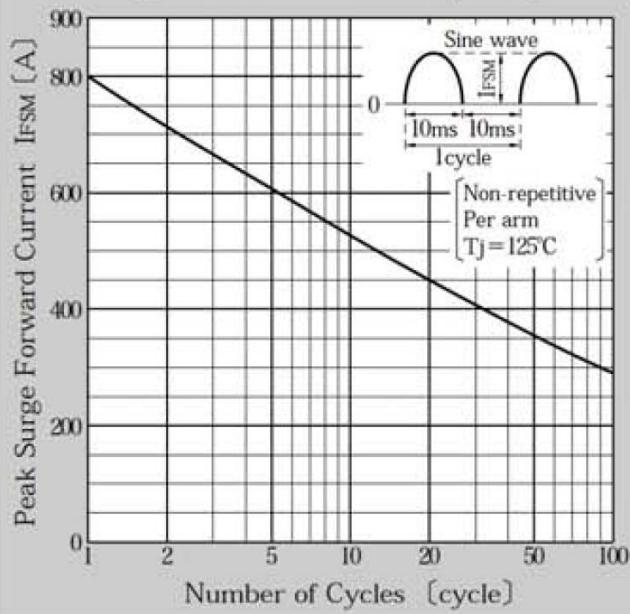
### Forward Voltage



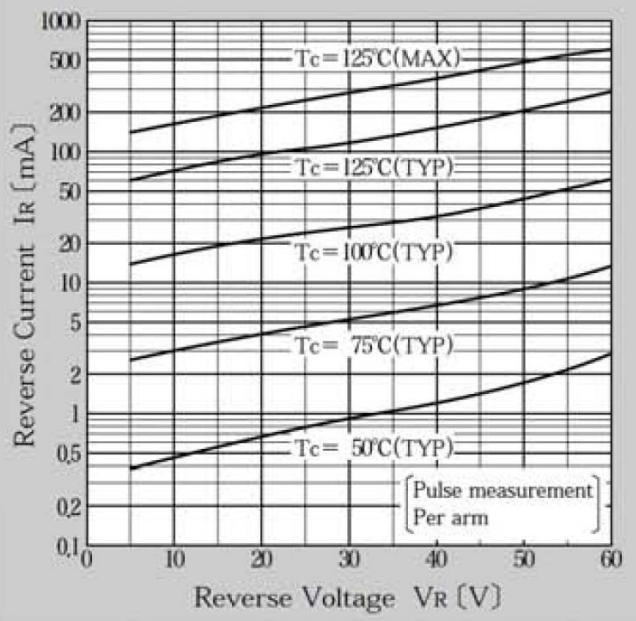
### Forward Power Dissipation



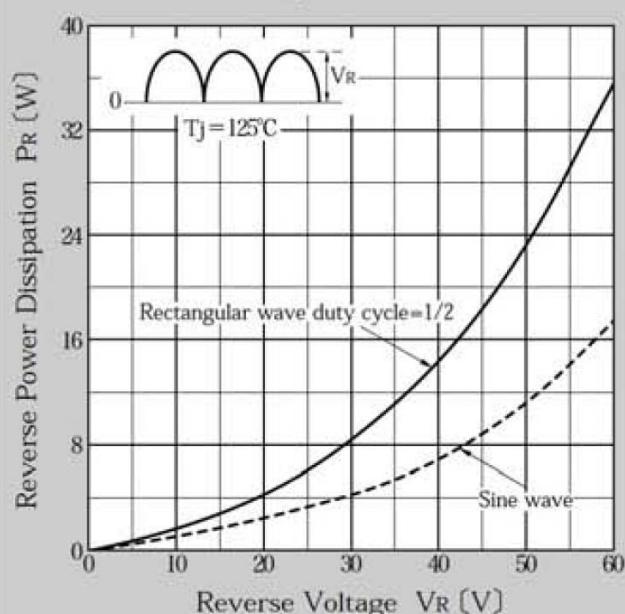
### Peak Surge Forward Current Capability



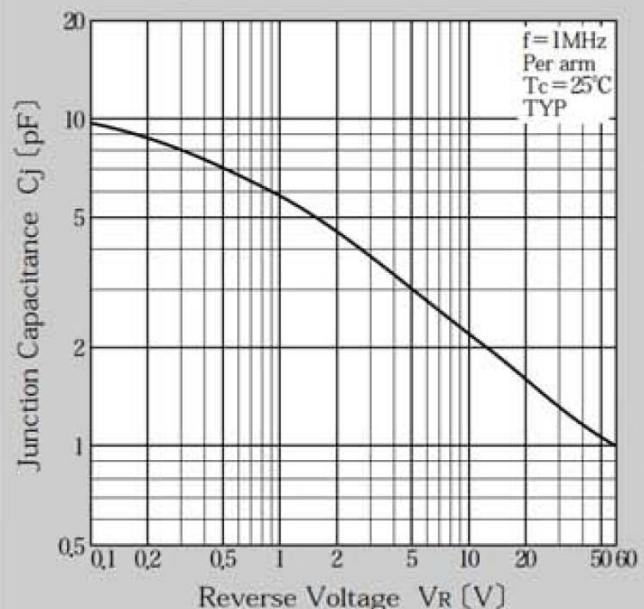
### Reverse Current



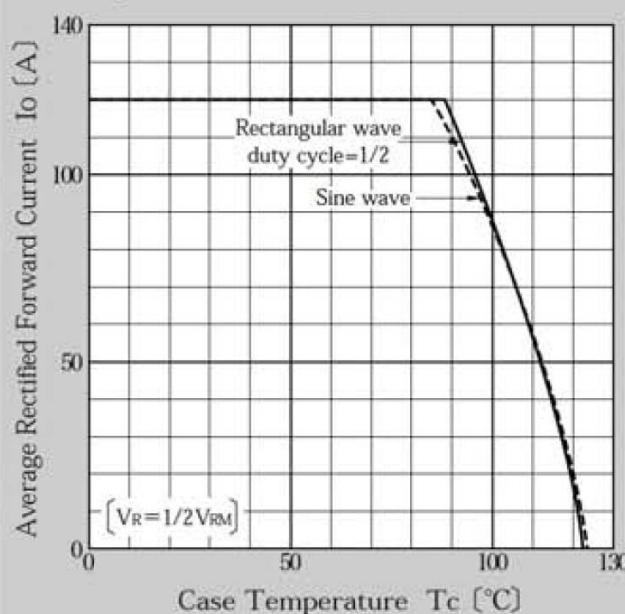
### Reverse Power Dissipation



### Junction Capacitance



### Derating Curve $T_c$ - $I_o$



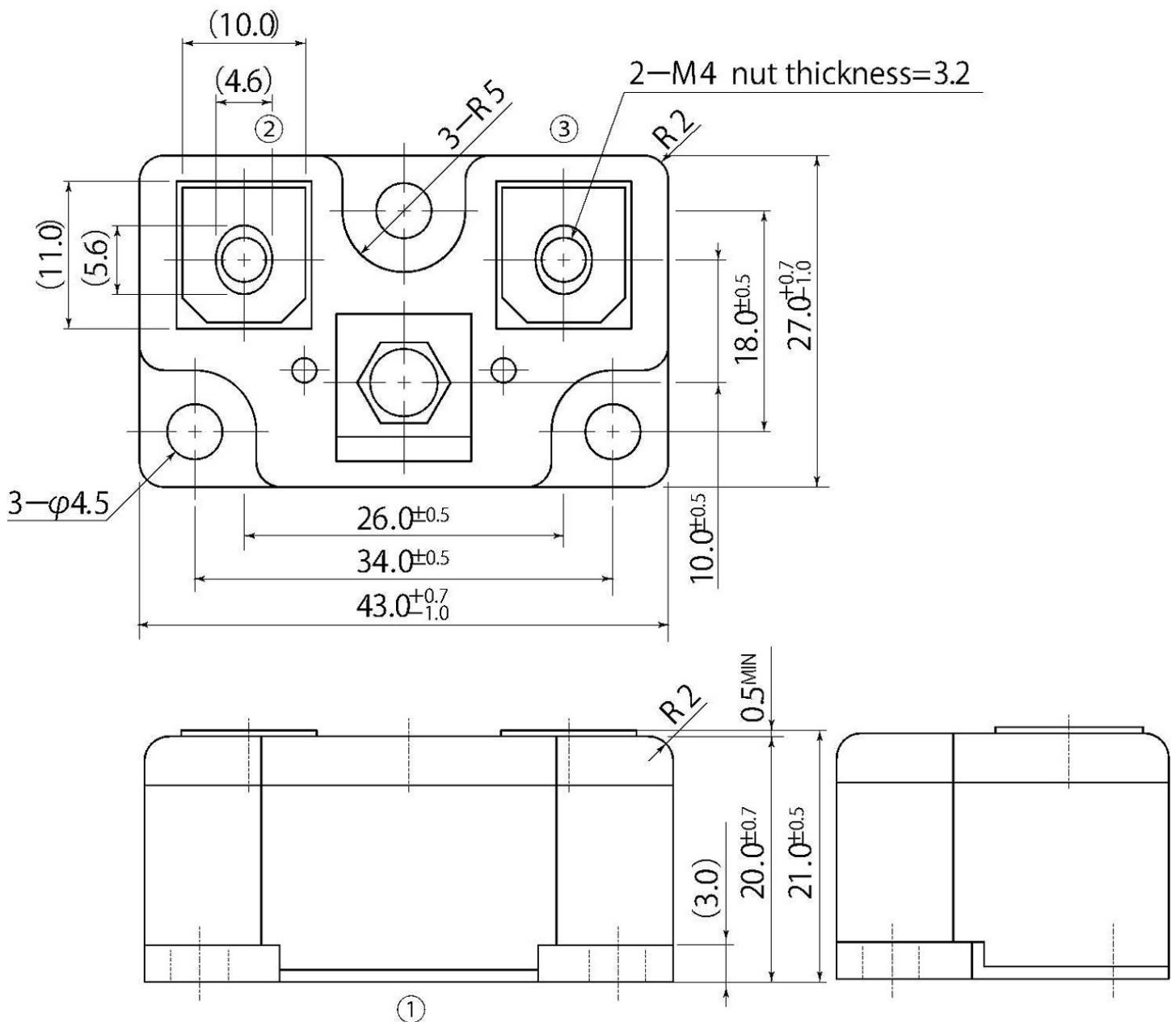
## Outline Dimensions

unit:mm

scale: 2/1

F1

JEDEC Code	–
JEITA Code	–
House Name	MODULE



## Notes

1. If you wish to use any such product, please be sure to refer to the specifications issued by Shindengen.
2. All products described or contained herein are designed with a quality level intended for use in standard applications requiring an ordinary level of reliability. If these products are to be used in equipment or devices for special or specific applications requiring an extremely high grade of quality or reliability in which failures or malfunctions of products may directly affect human life or health, a local Shindengen office must be contacted in advance to confirm that the intended use of the product is appropriate. Shindengen products are grouped into the following three applications according the quality grade.

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Computers, office automation and other office equipment, communication terminals, test and measurement equipment, audio/visual equipment, amusement equipment, consumer electronics, machine tools, personal electronic equipment, industrial equipment, etc.

### 【Special applications】

Transportation equipment (vehicles, ships, etc.), trunk-line communication equipment, traffic signal control systems, anti-disaster/crime systems, safety equipment, medical equipment, etc.

### 【Specific applications】

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