

# D120SC4M

## Schottky Barrier Diodes 40V, 120A

### Feature

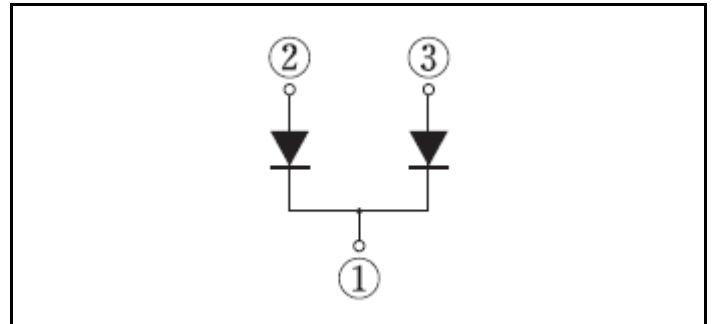
- High Io Rating Module Package
- High Recovery Speed
- Low  $V_F$
- Pb free terminal
- RoHS:Yes

### 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	$V_{RRM}$		40	V
Repetitive peak surge reverse voltage	$V_{RRSM}$	Pulse width 100ns, duty=1/100	48	V
Average forward current	$I_{F(AV)}$	50Hz sine wave, Resistance load, Rating for each arm $I_{F(AV)}/2$ , Tc=90°C	120	A
Surge forward current	$I_{FSM}$	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, per arm, Tj=125°C	800	A
Mounting torque	TOR		1.7	N·m

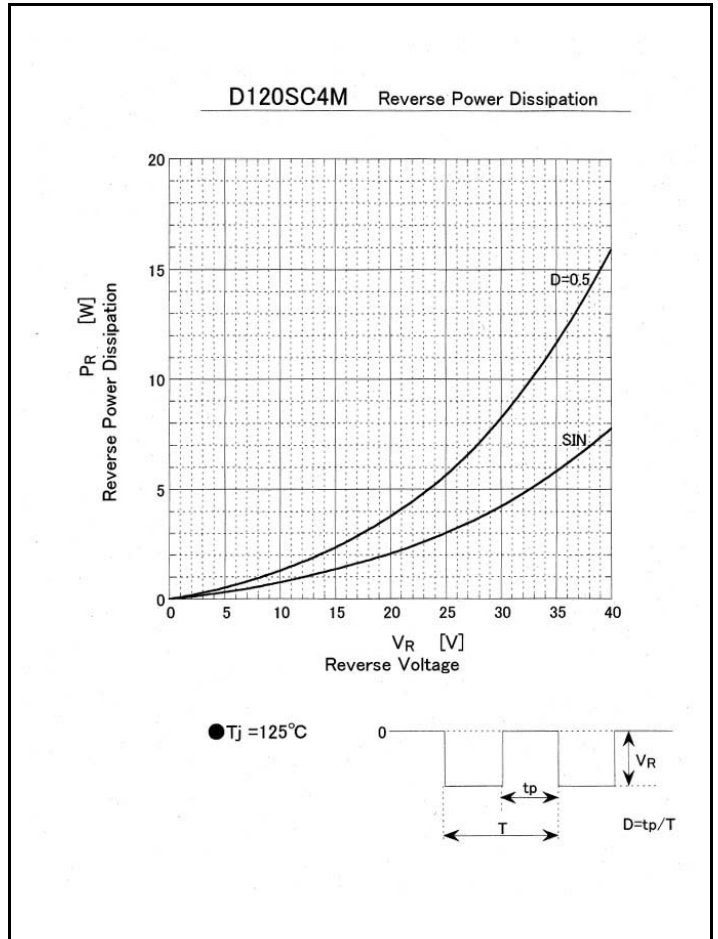
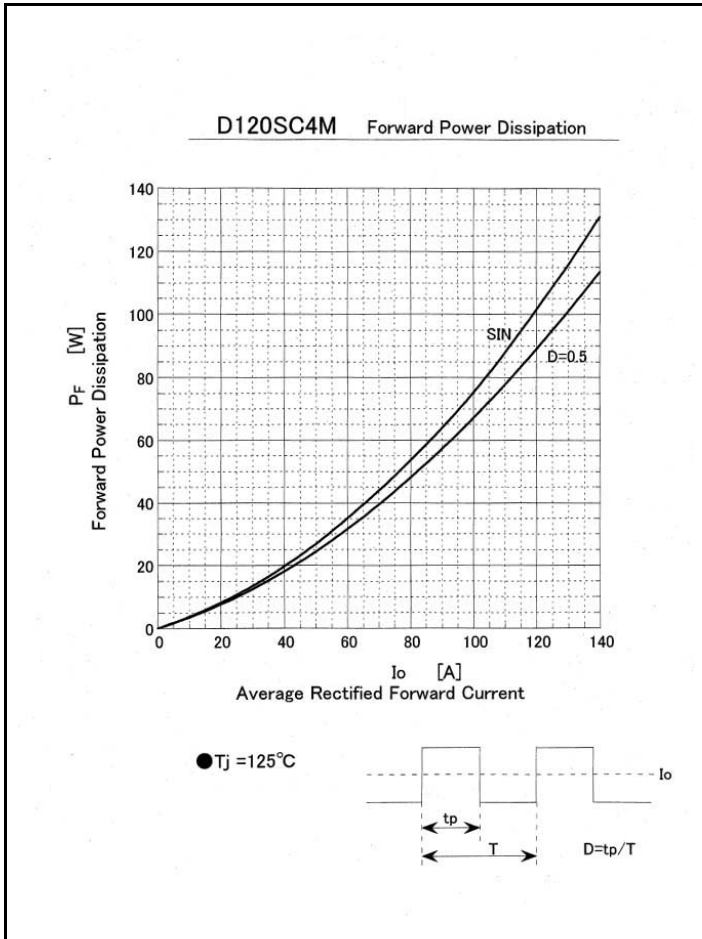
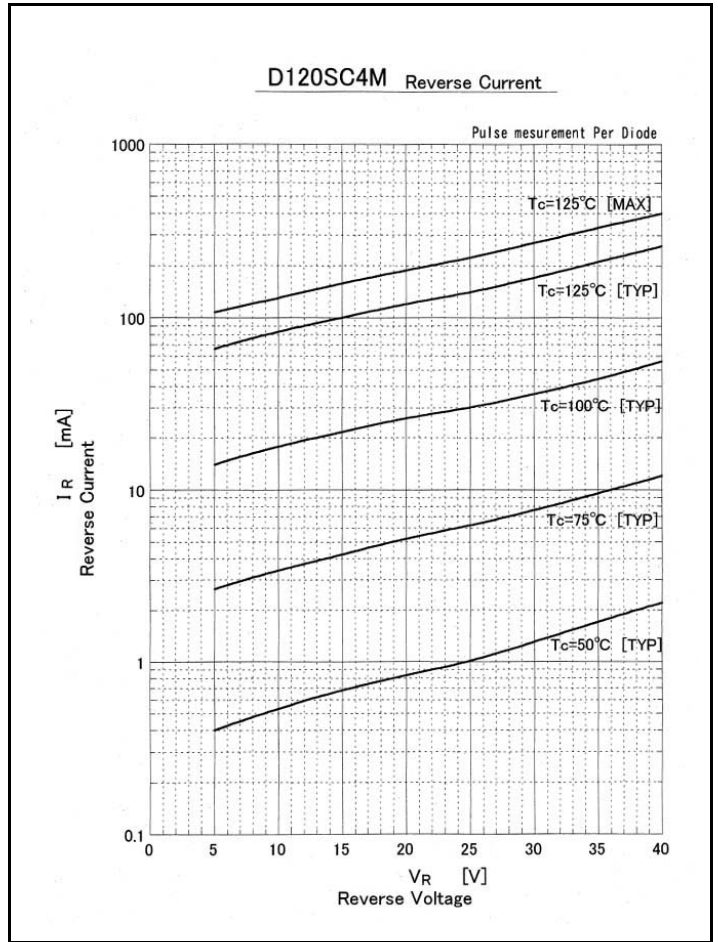
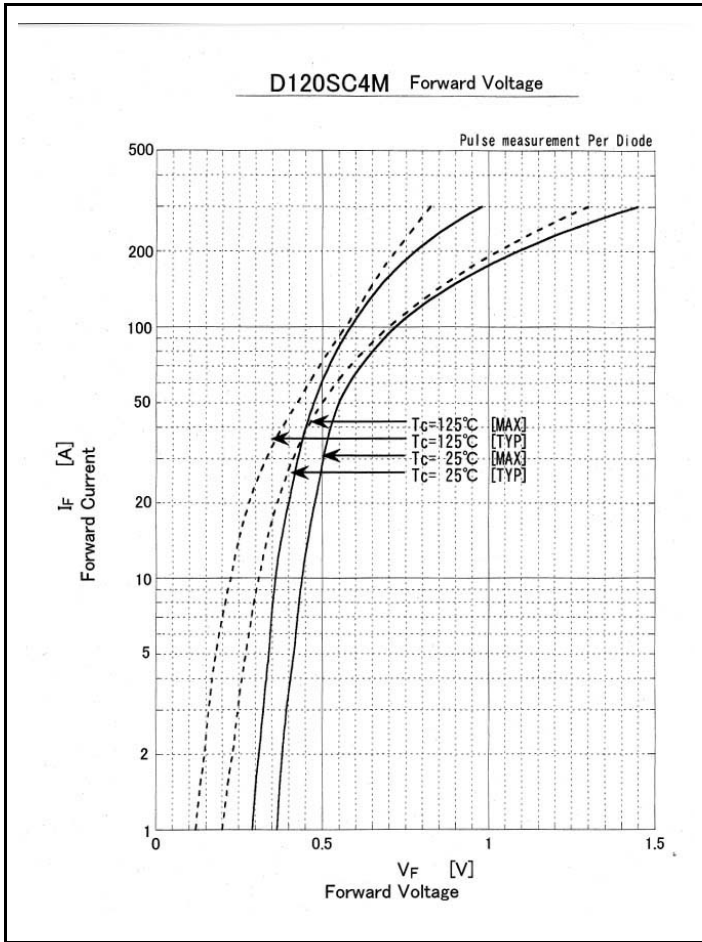
\* : See the original Specifications

**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

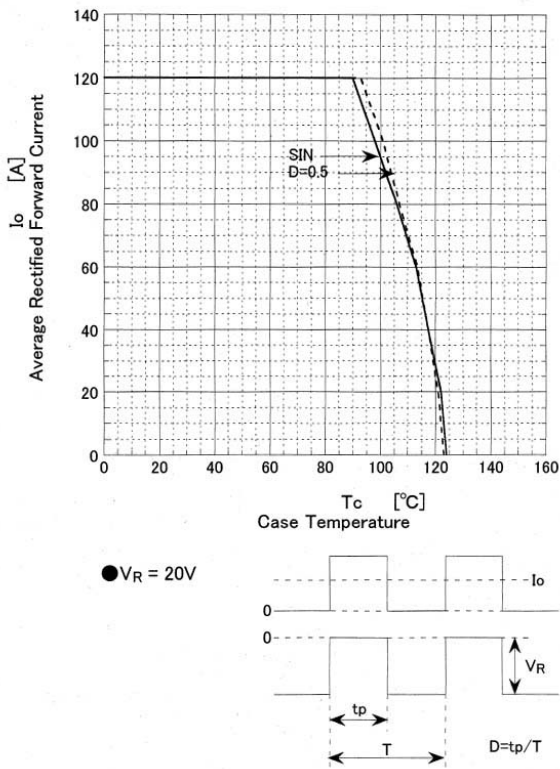
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =60A, Pulse measurement, per arm			0.58	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =40V, Pulse measurement, per arm			40	mA
Total capacitance	C <sub>t</sub>	f=1MHz, V <sub>R</sub> =10V, per arm		2100		pF
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case			0.34	°C/W

\* : See the original Specifications

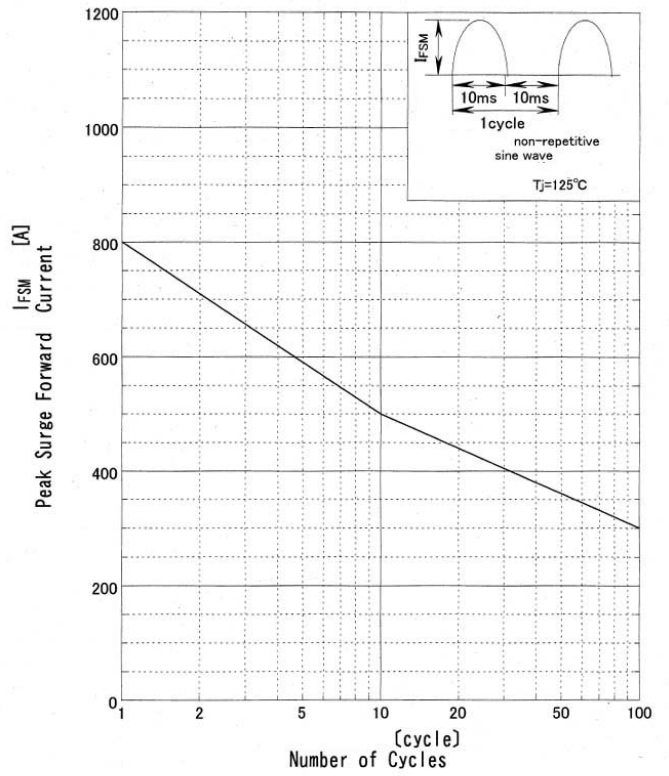
# CHARACTERISTIC DIAGRAMS



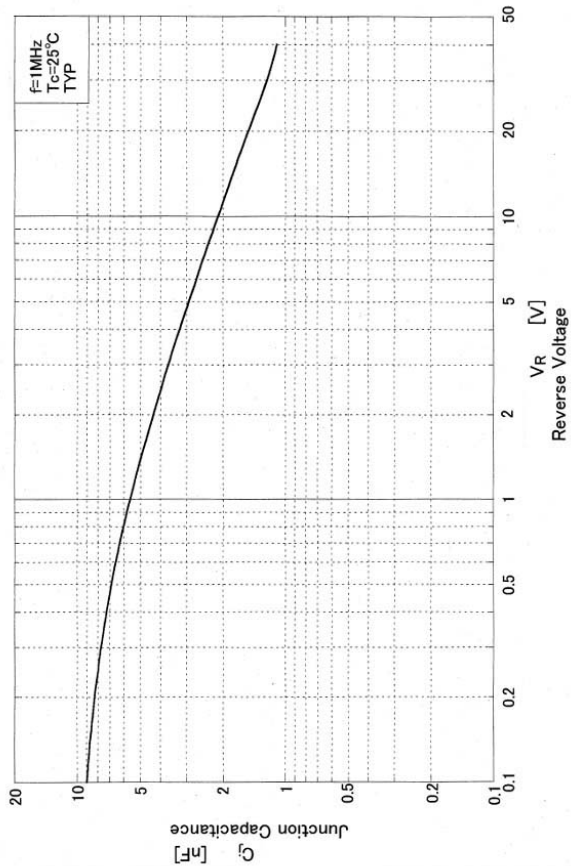
D120SC4M Derating Curve



D120SC4M Peak Surge Forward Capability

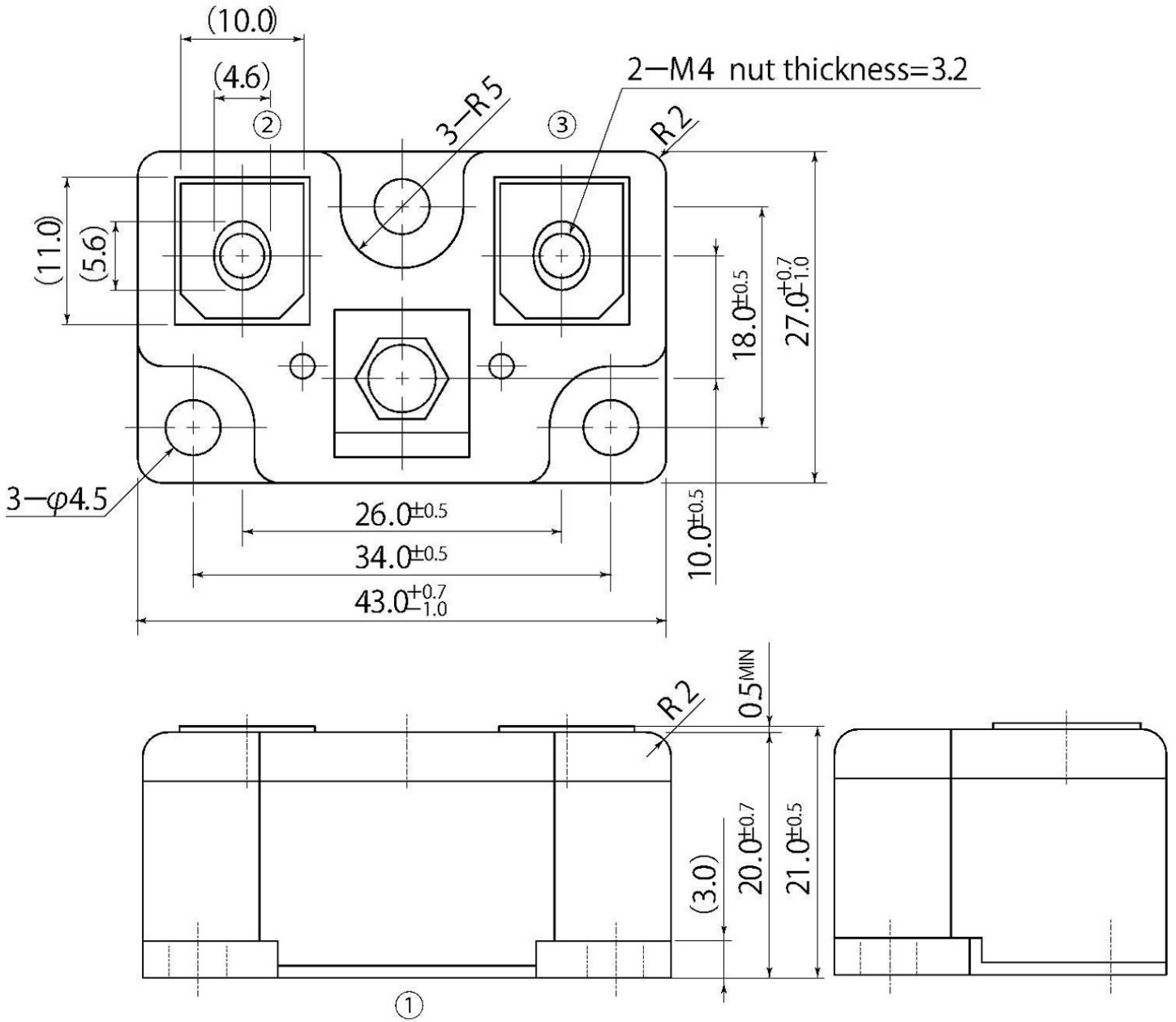


D120SC4M Junction Capacitance



F1

JEDEC Code	-
JEITA Code	-
House Name	MODULE



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