

D180SC4M

Schottky Barrier Diodes

40V, 180A

Feature

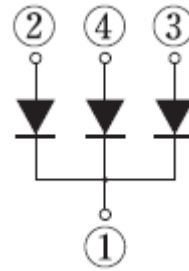
- High Io Rating Module Package
- High Recovery Speed
- Low V_F
- Pb free terminal
- RoHS:Yes

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 $I_F(AV)/3$, Tc=83°C	180	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

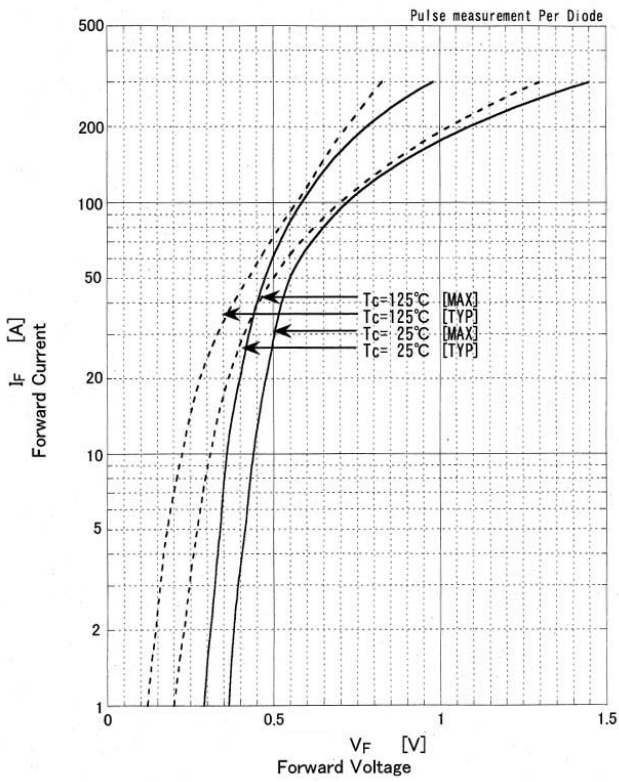
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =60A, Pulse measurement, per arm			0.58	V
Reverse current	I _R	V _R =40V, Pulse measurement, per arm			40	mA
Total capacitance	C _t	f=1MHz, V _R =10V, per arm		2100		pF
Thermal resistance	R _{th(j-c)}	Junction to case			0.25	°C/W

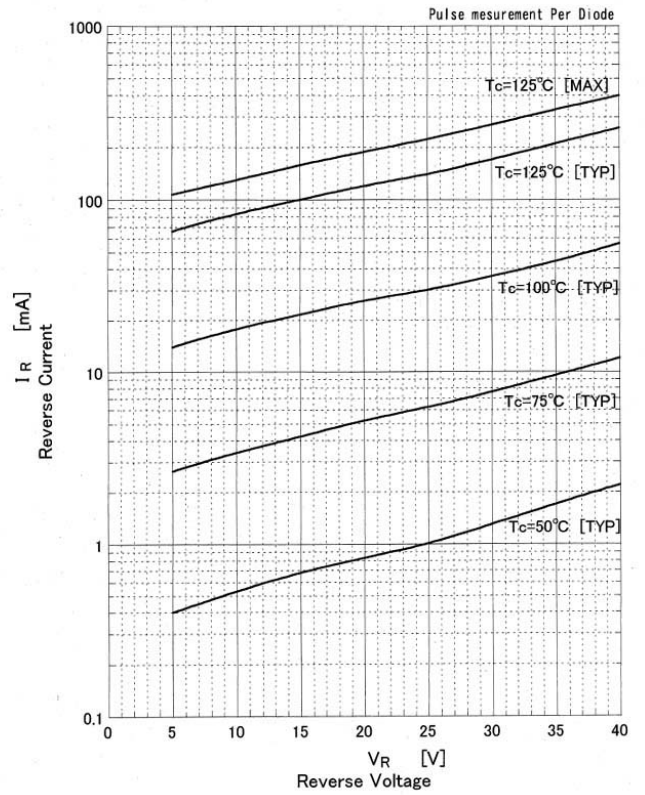
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CHARACTERISTIC DIAGRAMS

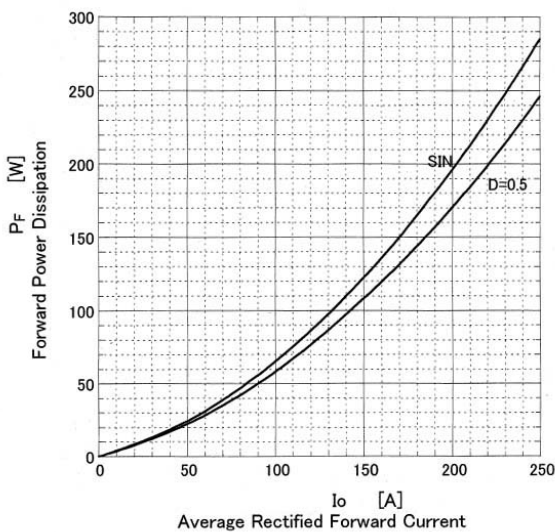
D180SC4M Forward Voltage



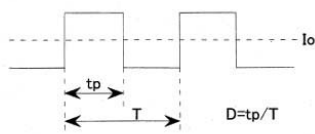
D180SC4M Reverse Current



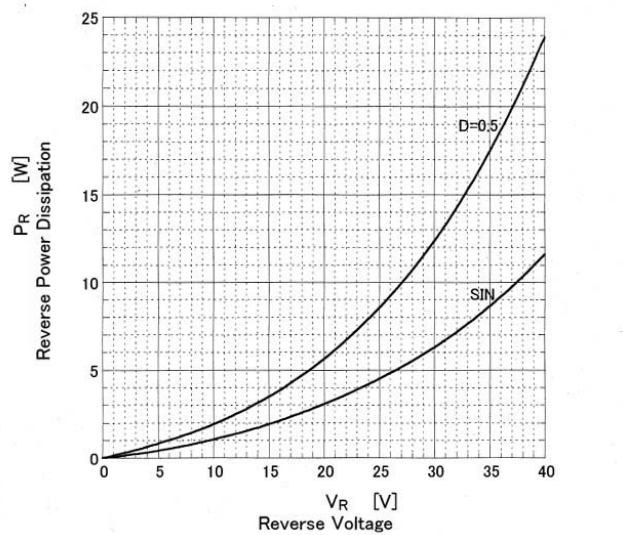
D180SC4M Forward Power Dissipation



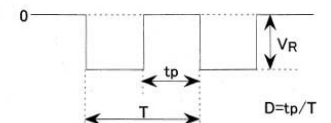
● $T_j=125^\circ\text{C}$



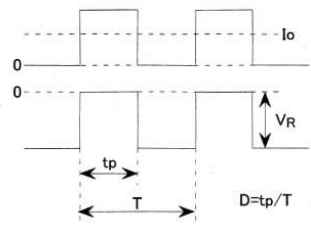
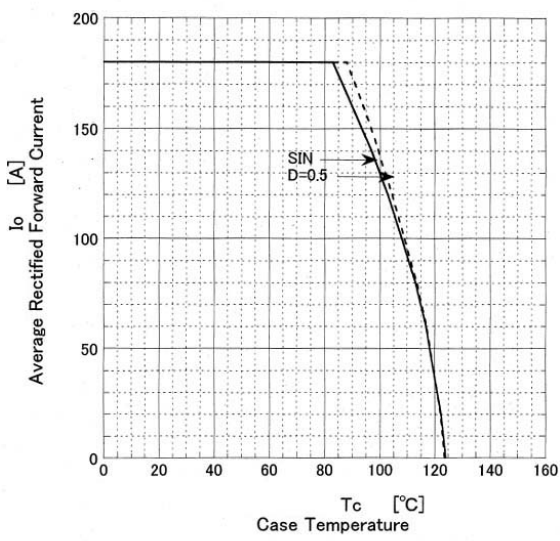
D180SC4M Reverse Power Dissipation



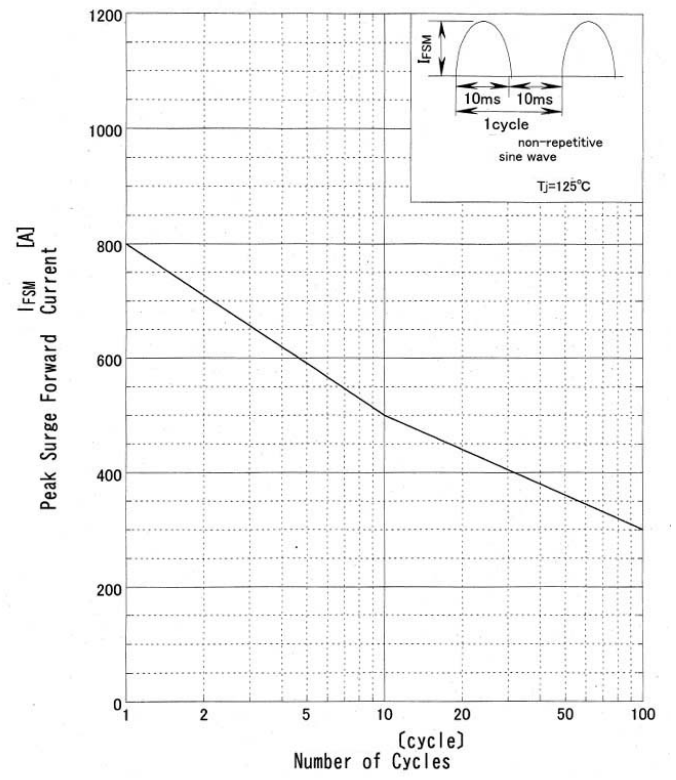
● $T_j=125^\circ\text{C}$



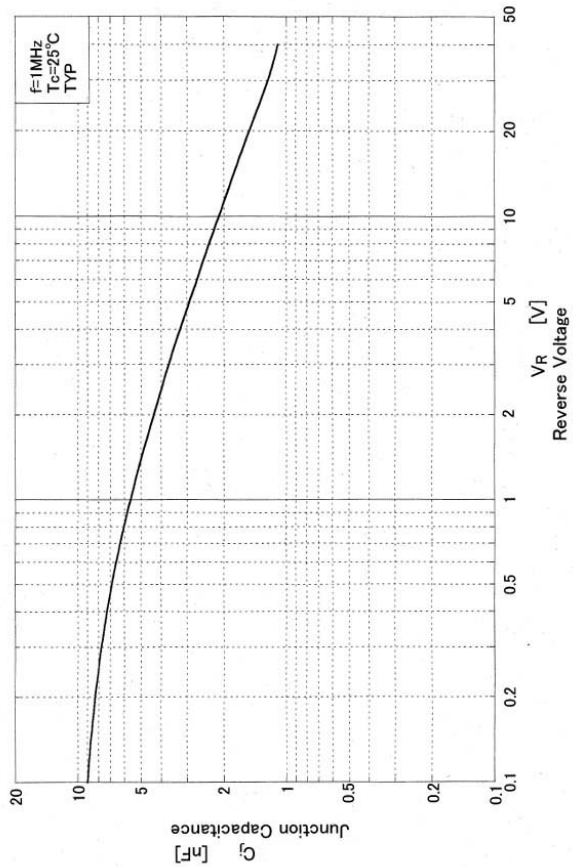
D180SC4M Derating Curve



D180SC4M Peak Surge Forward Capability

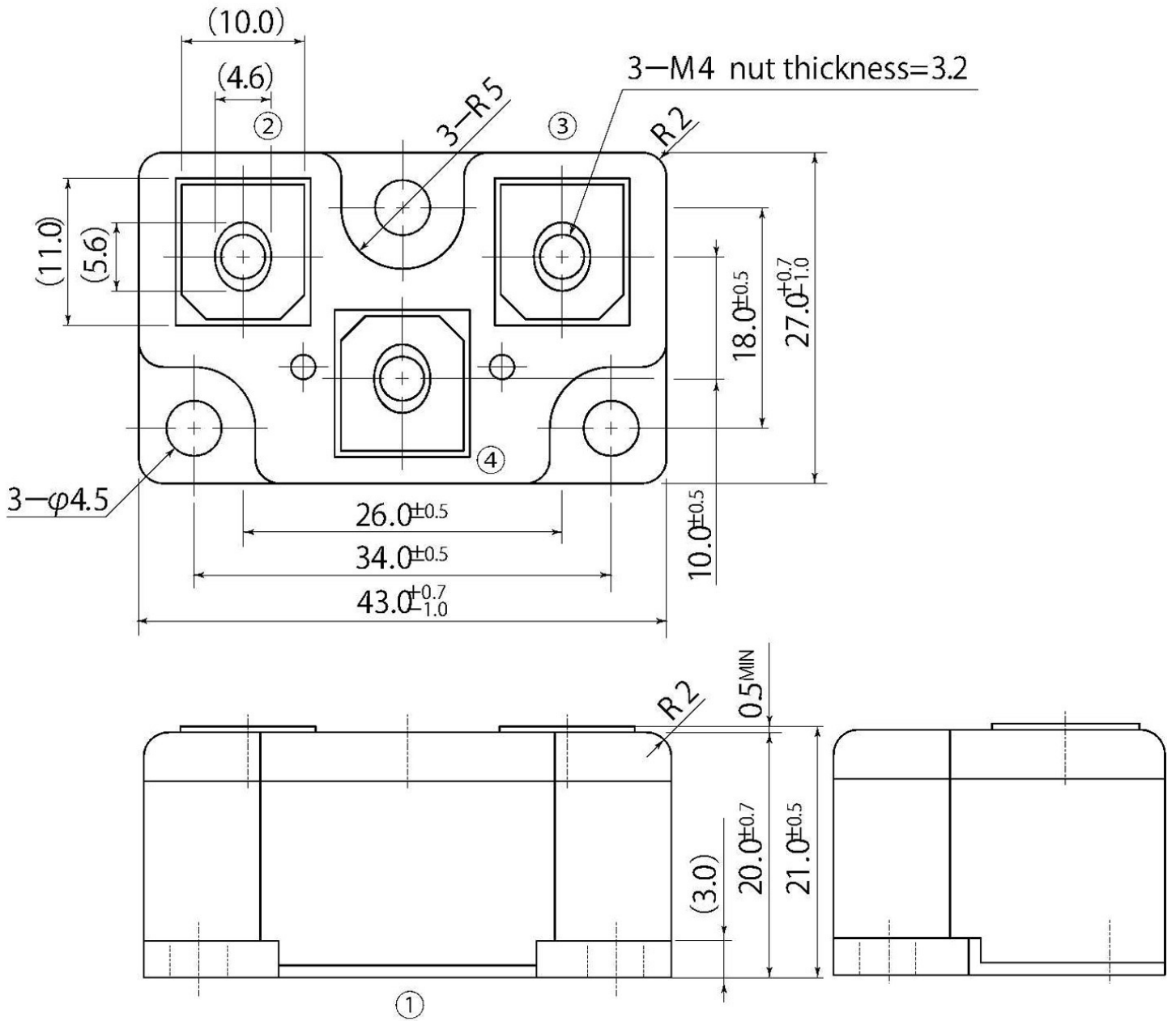


D180SC4M Junction Capacitance



F3

JEDEC Code	-
JEITA Code	-
House Name	MODULE



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