

D45JCT120V

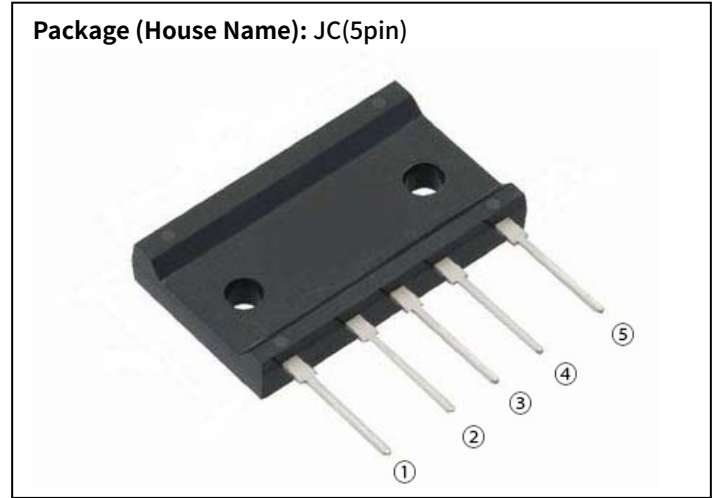
Bridge Diodes
1200V, 45A

Feature

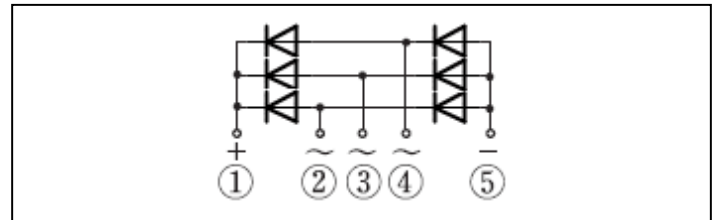
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): JC(5pin)



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-40 to 150	°C
Junction temperature	Tj		-40 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		1200	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, With heatsink, Tc=99°C	45	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Without heatsink, Ta=25°C ※	4.6	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, per diode, Tj=25°C	450	A
Surge forward current	I _{FSM1}	tp=1ms, sine wave, Non-repetitive, peak value, per diode, Tj=25°C	1423	A
Current squared time	I ² t	1ms ≤ t < 10ms, Tj=25°C, per diode	1013	A ² s
Dielectric strength	Vdis	Terminals to case, AC 1 minute, Except top (opposite side of the terminal side) of the mold case	2.5	kV
Mounting torque	TOR	(Recommended torque : 1.2N·m)	1.5	N·m

※ : See the original Specifications

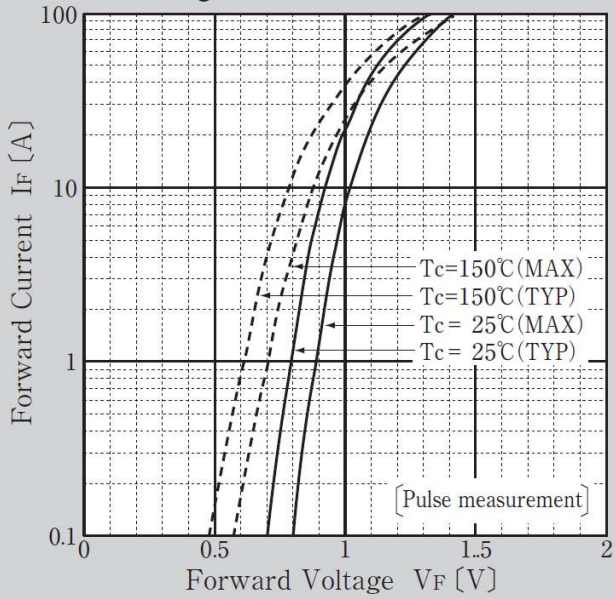
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	IF=15A, Pulse measurement, per diode			1.05	V
Reverse current	I _R	VR=1200V, Pulse measurement, per diode			10	μA
Thermal resistance	Rth(j-c)	Junction to case ,With heatsink			0.5	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			16	°C/W

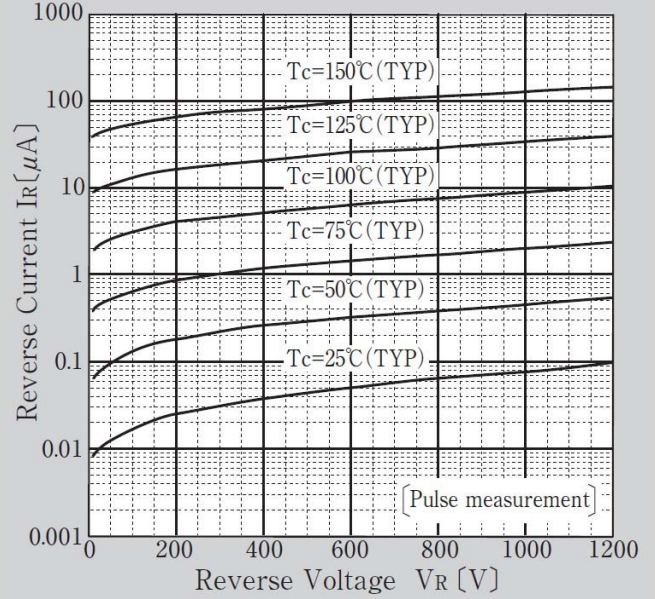
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

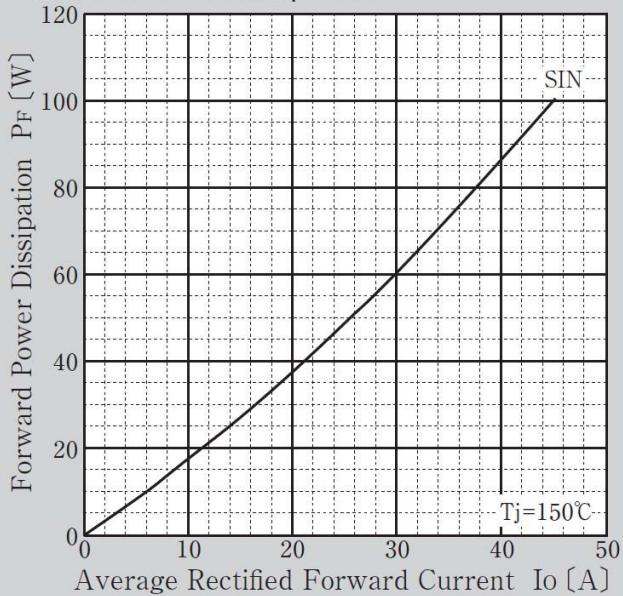
Forward Voltage



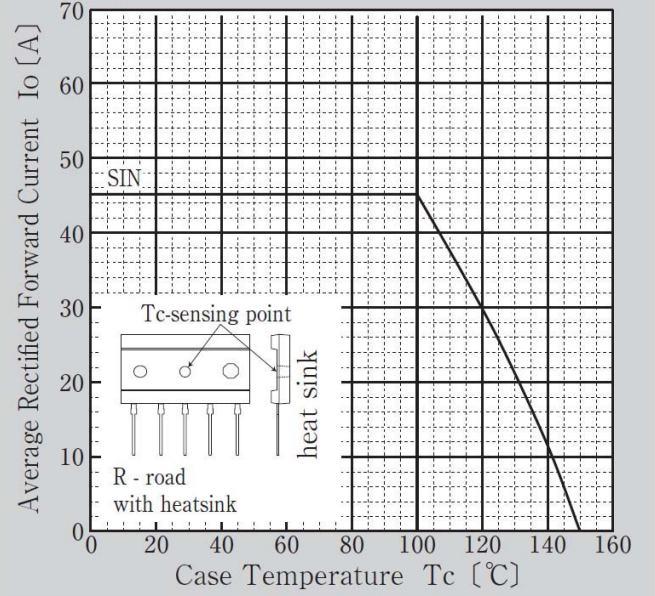
Reverse Current



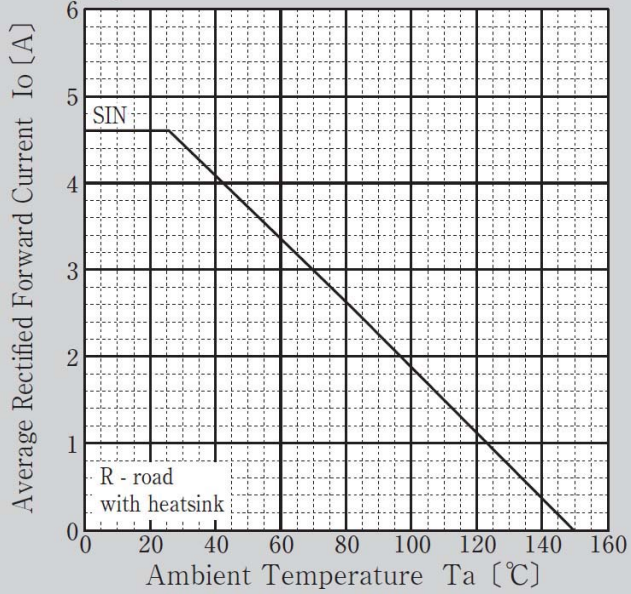
Forward Power Dissipation



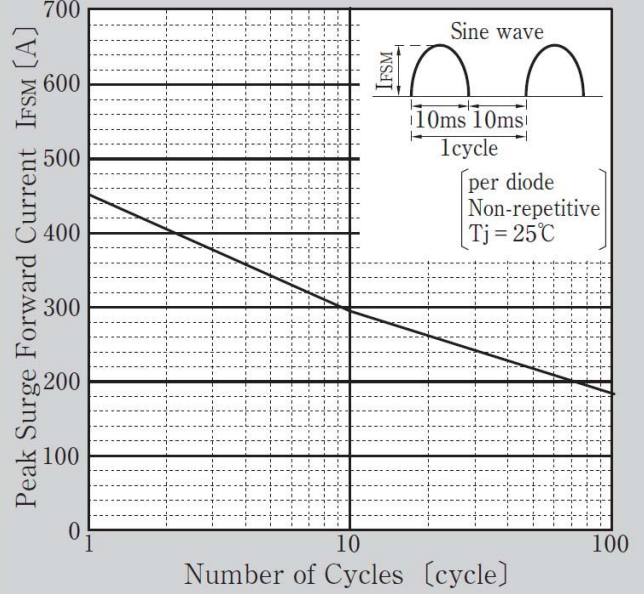
Derating Curve



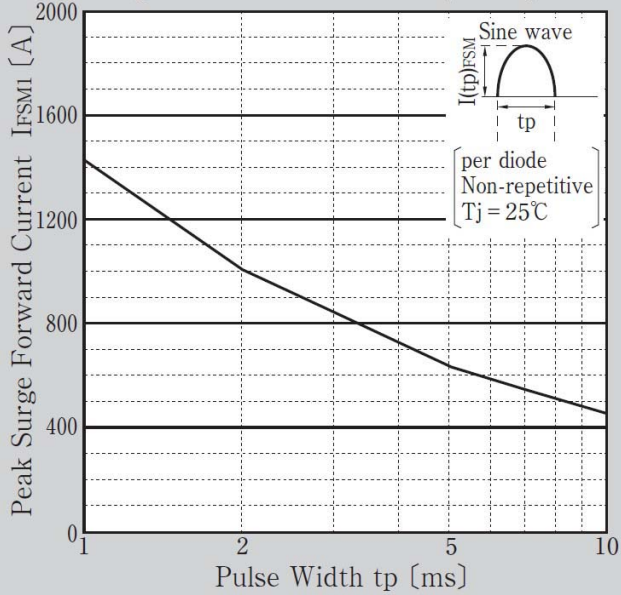
Derating Curve



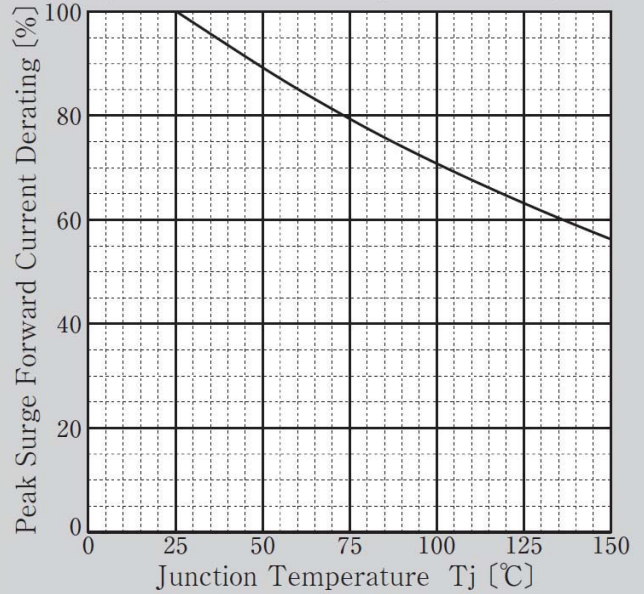
Peak Surge Forward Current Capability



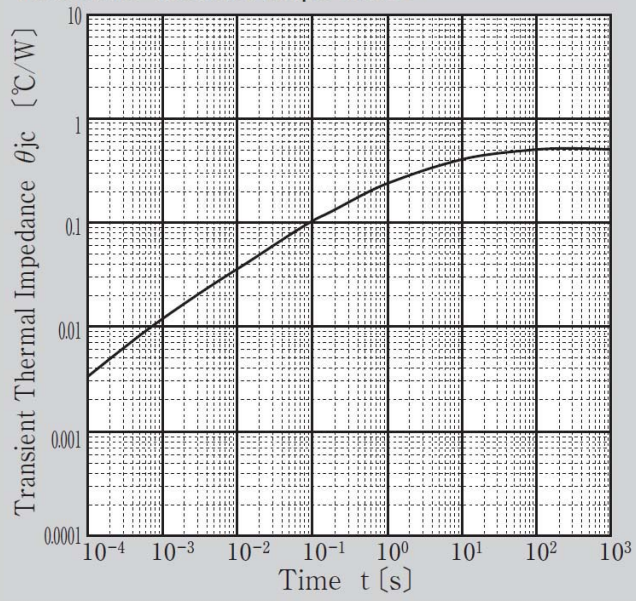
Peak Surge Forward Current Capability



Peak Surge Forward Current Derating vs Junction Temperature



Transient Thermal Impedance



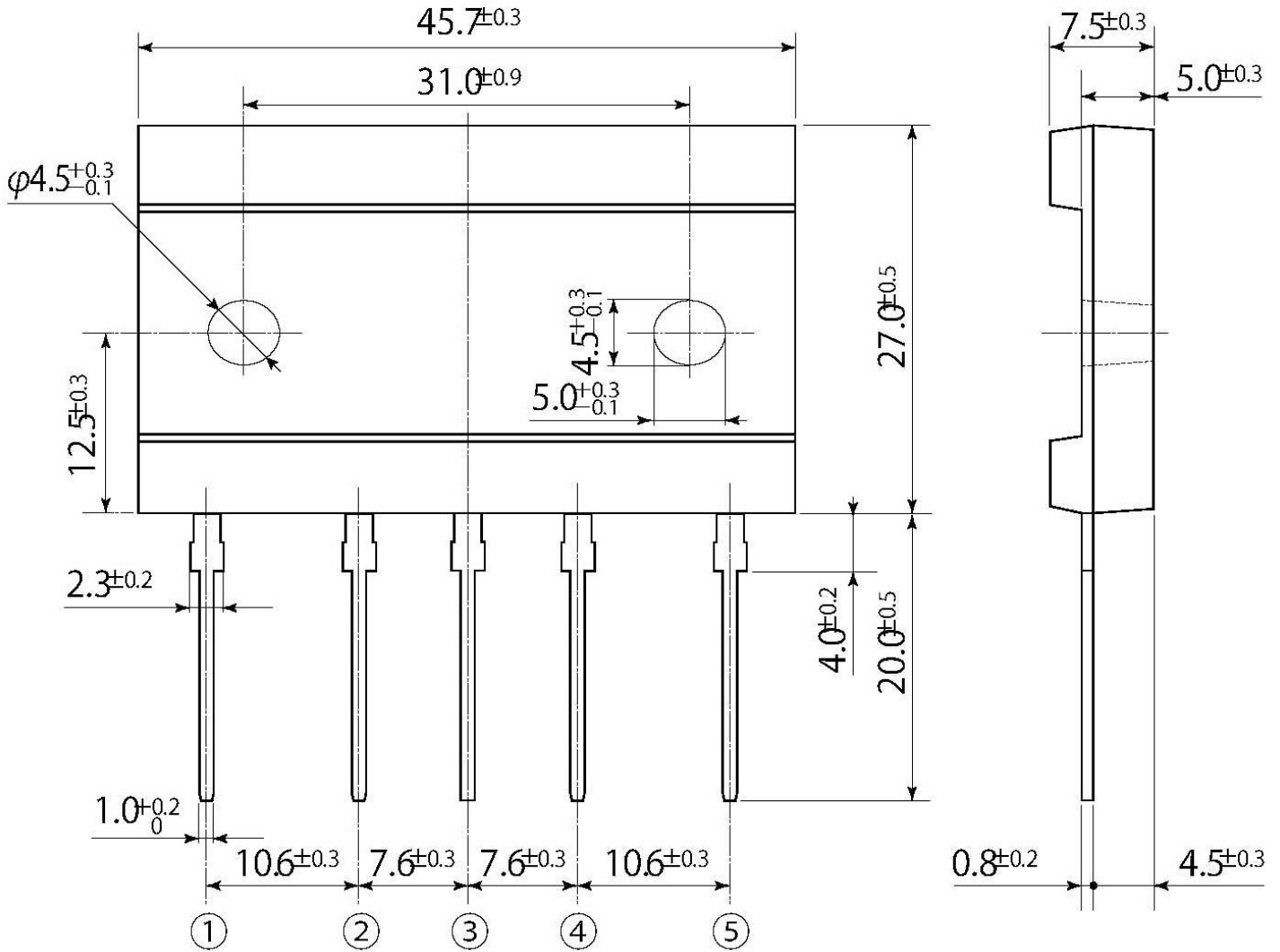
Outline Dimensions

unit:mm

scale: 2/1

D8

JEDEC Code	-
JEITA Code	-
House Name	TSB(5pin),JC(5pin)



Notes

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