

D45XT160

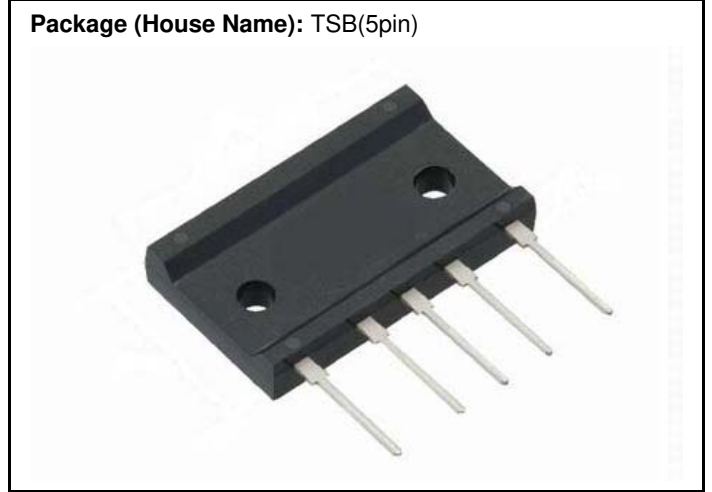
Bridge Diodes
1600V, 45A

Feature

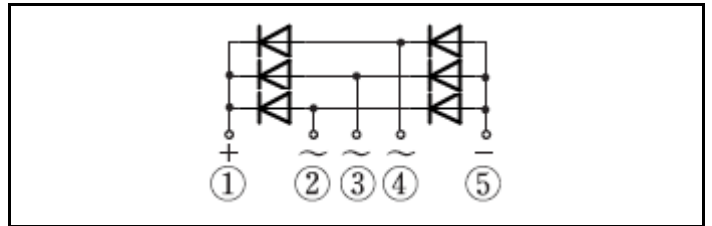
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): TSB(5pin)



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T _{stg}		-40 to 150	°C
Junction temperature	T _j		150	°C
Repetitive peak reverse voltage	V _{RRM}		1600	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, With heatsink, T _c =97°C	45	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Without heatsink, T _a =26°C	4.6	A
Surge forward current	I _{FSM}	60Hz sine wave, Non-repetitive 1 cycle peak value, T _j =25°C	360	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, per diode, T _j =25°C	330	A
Current squared time	I ² t	1ms ≤ t < 10ms, per diode	544.5	A ² s
Dielectric strength	V _{dis}	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

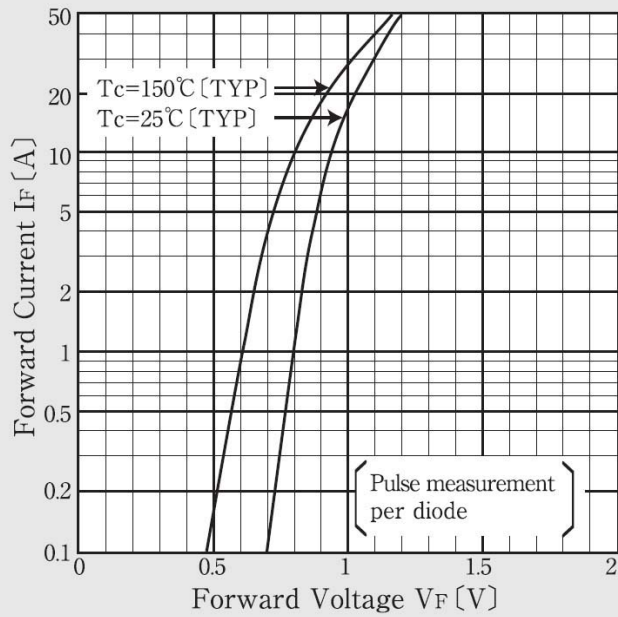
Electrical Characteristics (unless otherwise specified : Tc=25°C)

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=1600V, Pulse measurement, per diode			100	μ A
Thermal resistance	Rth(j-c)	Junction to case			0.5	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient			16	°C/W

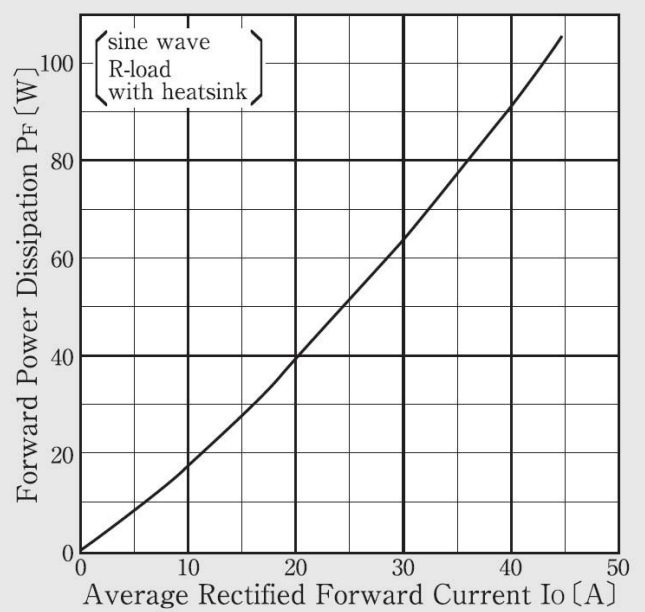
* : See the original Specifications

CHARACTERISTIC DIAGRAMS

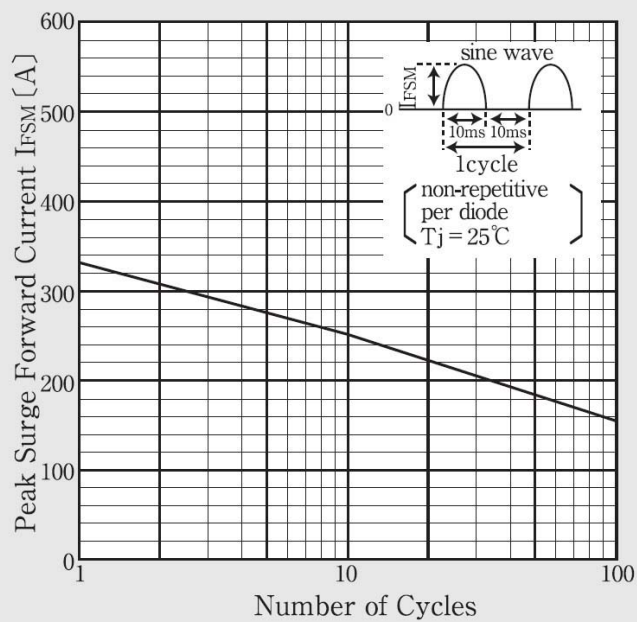
Forward Voltage



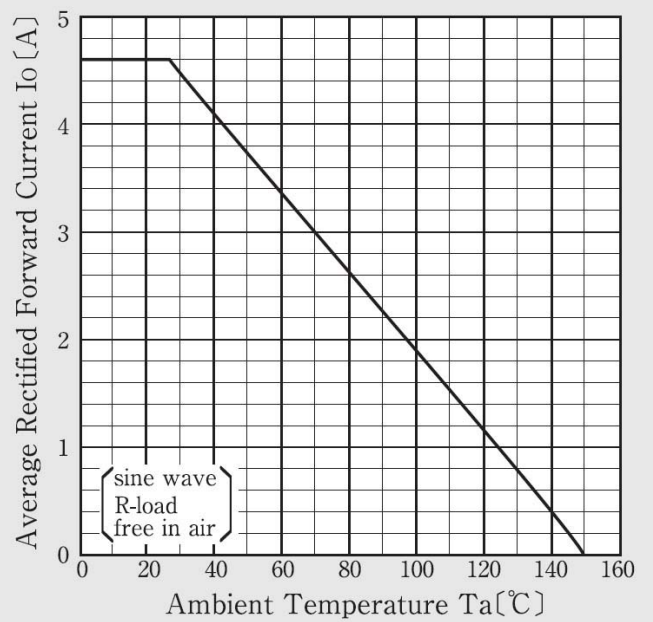
Forward Power Dissipation



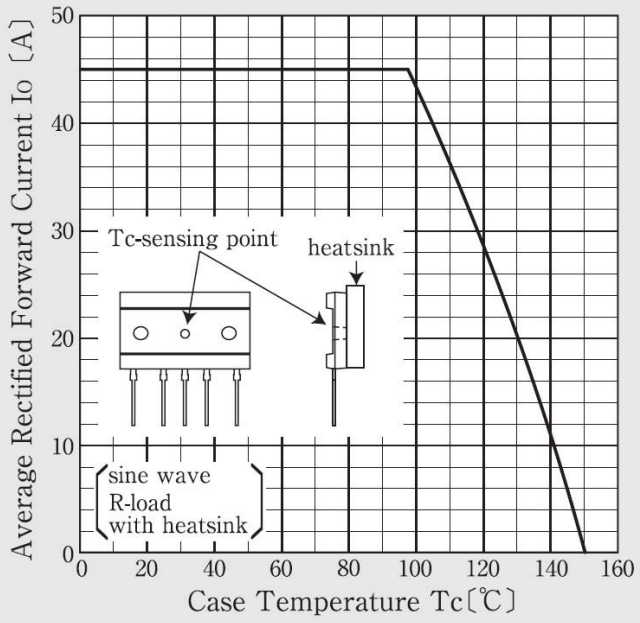
Peak Surge Forward Current Capability



Derating Curve



Derating Curve



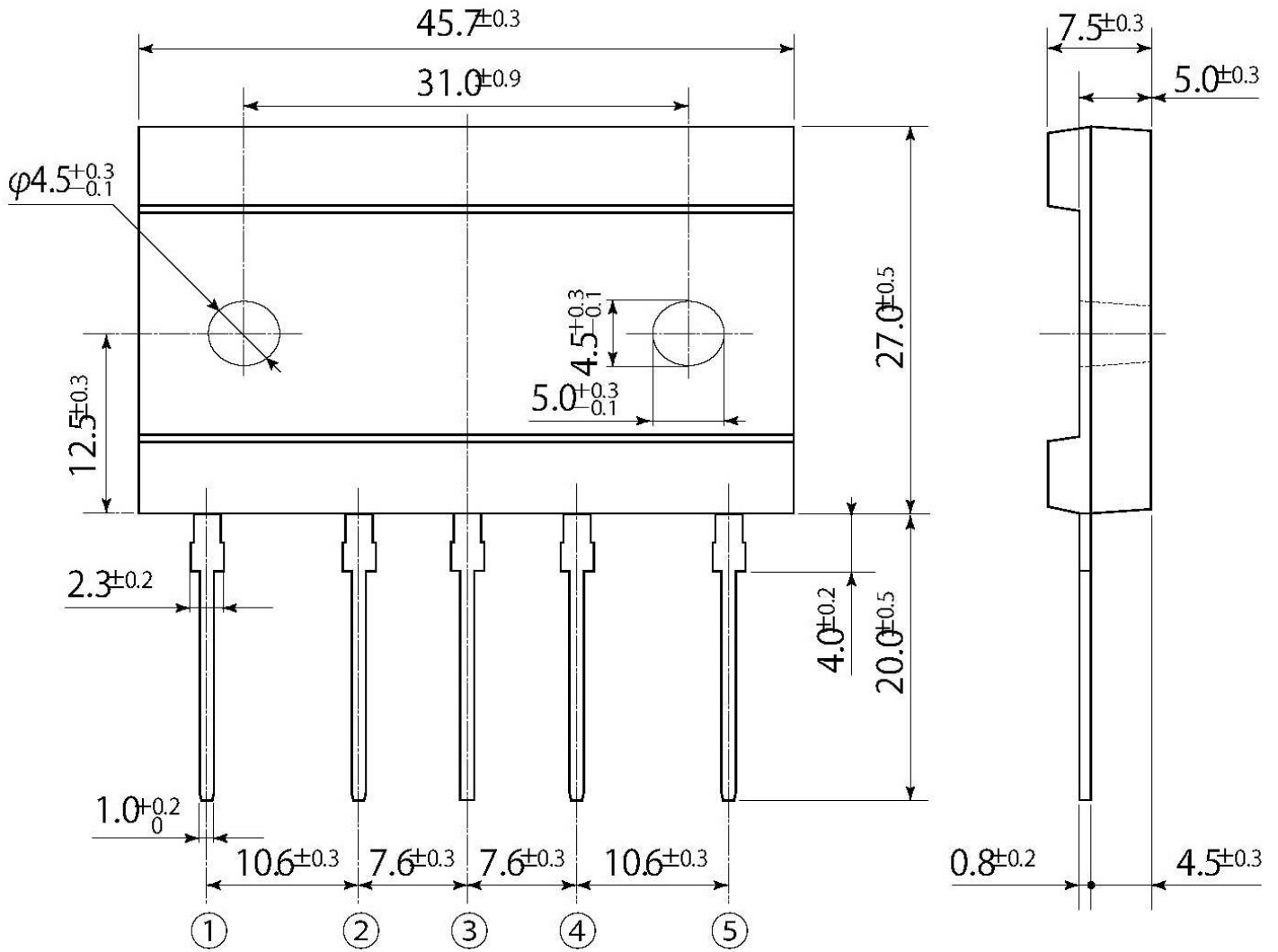
Outline Dimensions

unit:mm

scale: 2/1

D8

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



Notes

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