

D50XB80

Bridge Diodes
800V, 50A

Feature

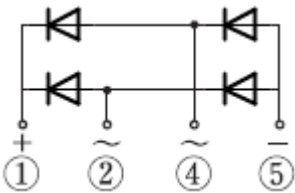
- Compact SIP
- UL E142422
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): TSB(4pin)



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-40 to 150	°C
Junction temperature	Tj		-40 to 150	°C
Repetitive peak reverse voltage	VRRM		800	V
Average forward current	IF(AV)	50Hz sine wave, Resistance load, With heatsink, Tc=95°C	50	A
Average forward current	IF(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=26°C ※	4.6	A
Surge forward current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	600	A
Current squared time	I²t	1ms≤tp<10ms, Tj=25°C, per diode	1800	A²s
Dielectric strength	Vdis	Terminals to case, AC 1 minute, Except top (opposite side of the terminal side) of the mold case	2	kV
Mounting torque	TOR	(Recommended torque : 1.2N・m)	1.5	N・m

※ :See the original Specifications

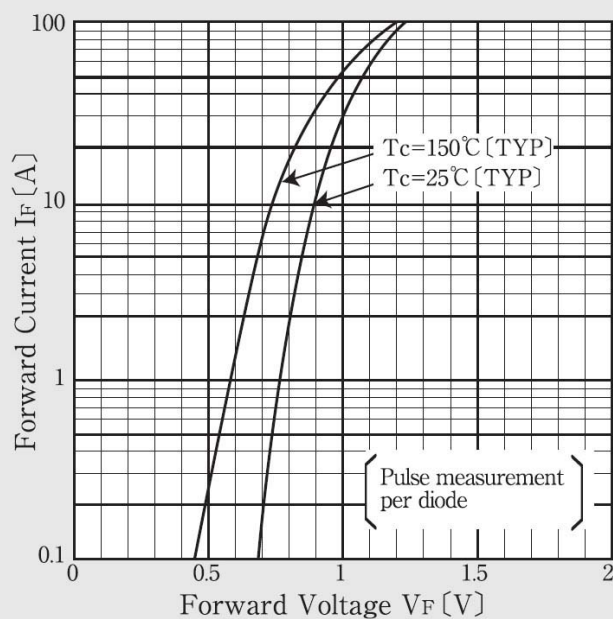
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=25A$, Pulse measurement, per diode			1.05	V
Reverse current	I_R	$V_R=800V$, Pulse measurement, per diode			10	μA
Thermal resistance	$R_{th(j-c)}$	Junction to case, With heatsink			0.5	$^{\circ}C/W$
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate ※			16	$^{\circ}C/W$

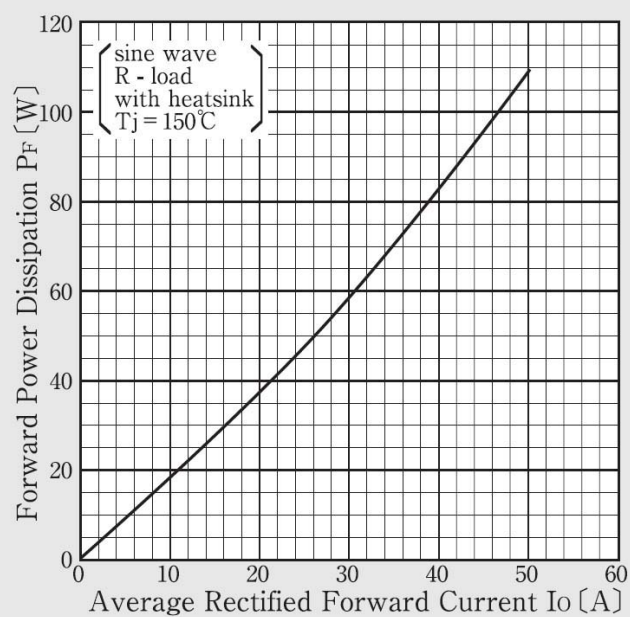
※ : See the original Specifications

CHARACTERISTIC DIAGRAMS

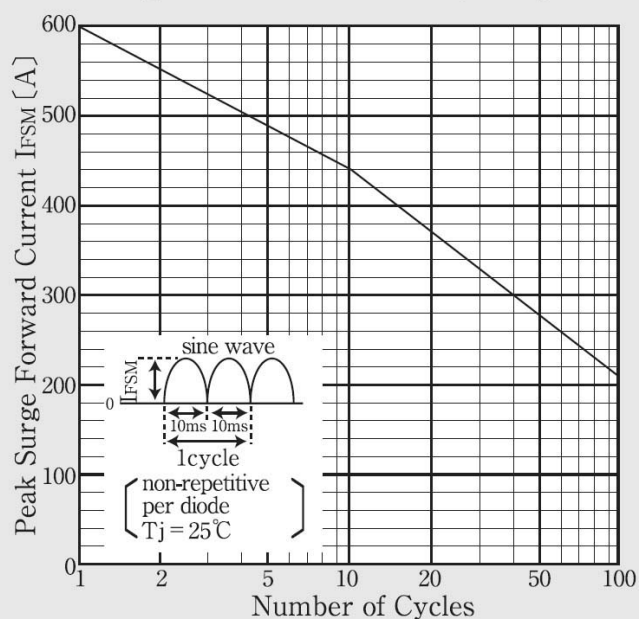
Forward Voltage



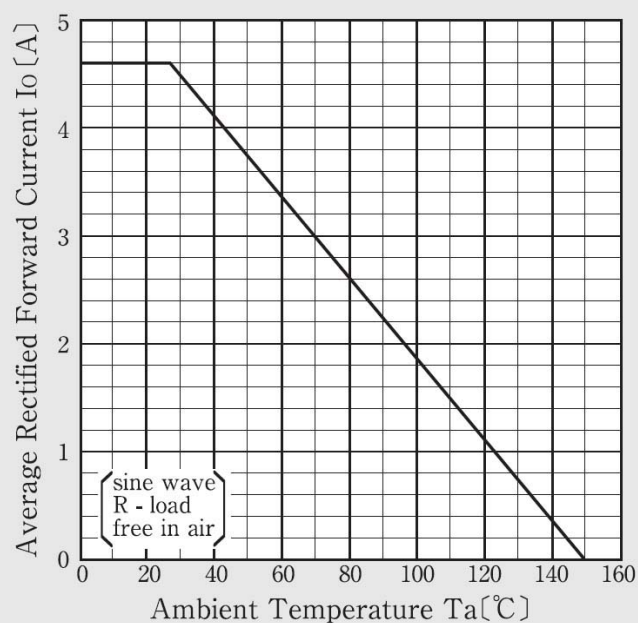
Forward Power Dissipation



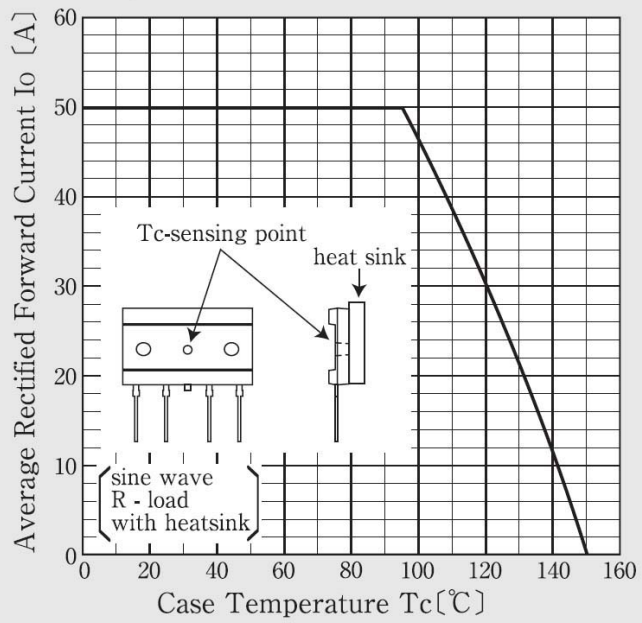
Peak Surge Forward Current Capability



Derating Curve

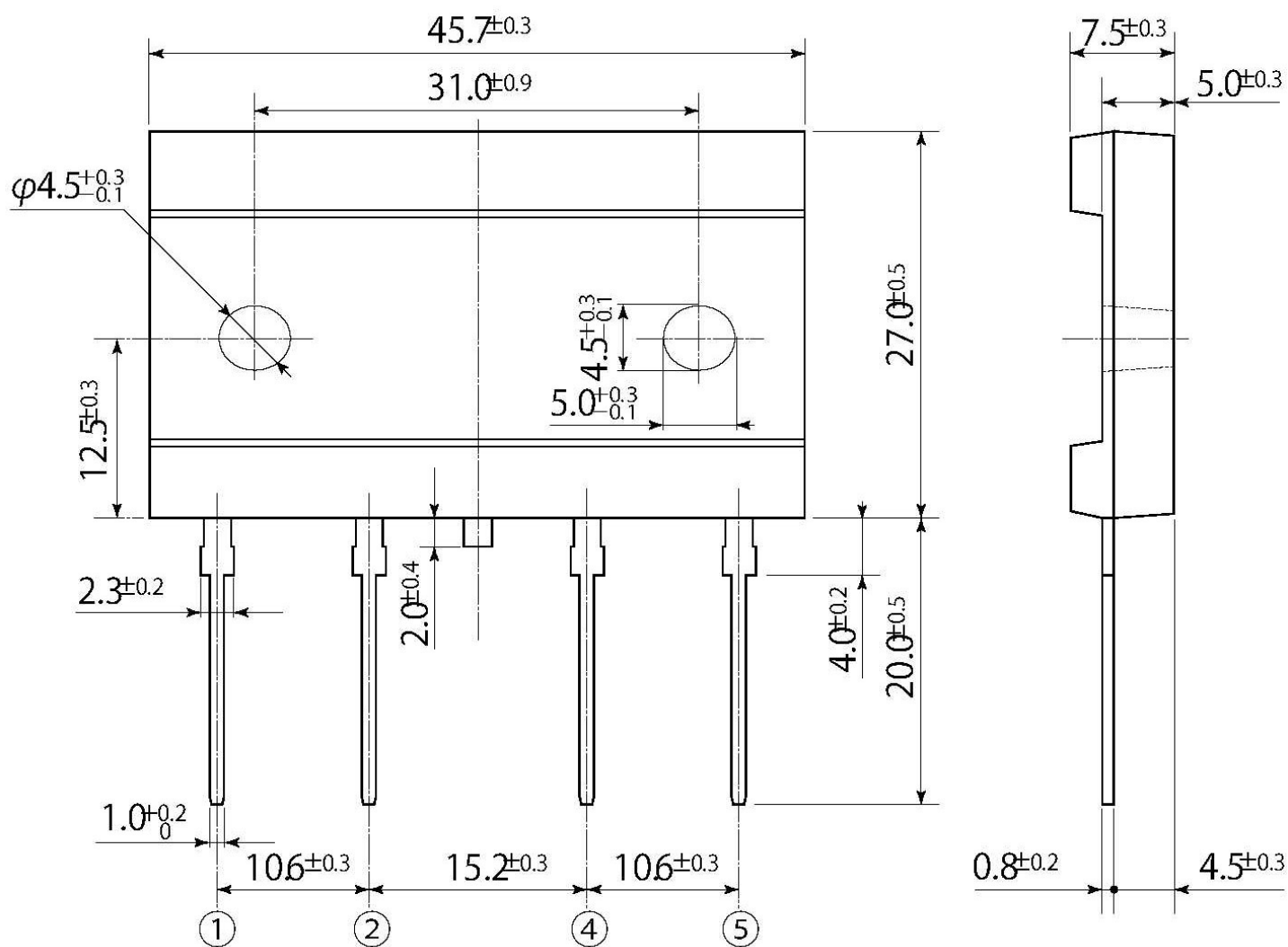


Derating Curve



D7

JEDEC Code	—
JEITA Code	—
House Name	TSB(4pin),JC(4pin)



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