SiPower

Power Semiconductor Technology

T4UB (20~80)
Bridge Rectifier

■ Features

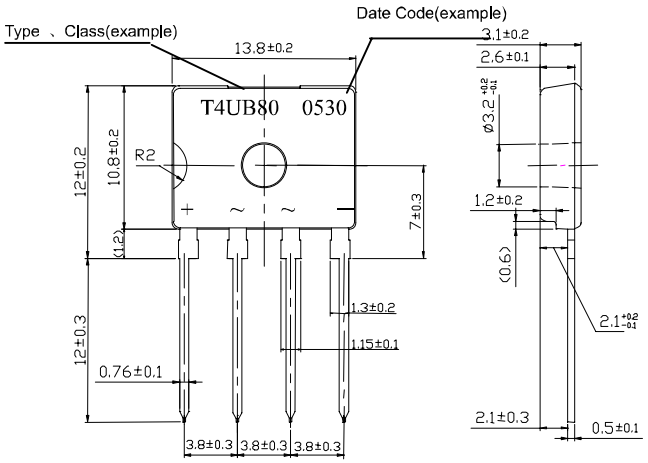
- I_o 4.0A
- V_{RRM} 200V~800V
- Glass passivated chip
- High surge forward current capability
- Small size

■ Applications

- General purpose 1 phase Bridge rectifier applications

Outline Dimensions and Mark

2U Unit：mm



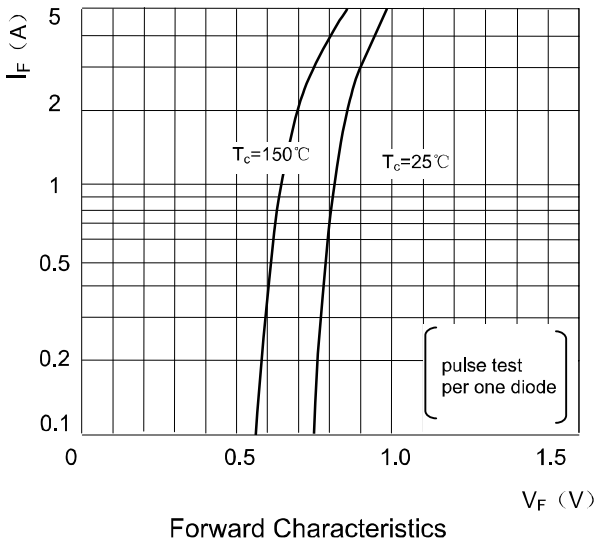
■ Limiting Values（Absolute Maximum Rating）

Item	Symbol	Unit	Conditions		T4UB 20	40	60	80
Storage Temperature	T_{stg}	℃			-55~ +150			
Junction Temperature	T_j	℃			+150			
Repetitive Peak Reverse Voltage	V_{RRM}	V			800			
Average Rectified Output Current	I_o	A	60Hz sine wave, R-load,	Without heatsink T_a=29℃	1.3			
				With heatsink T_c=140℃	4.0			
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, T_j=25℃		135			
Current Squared Time	I^2t	A^2s	3ms≤t＜8.3ms Tj=25℃,Rating of per diode		75			
Dielectric Strength	Vdis	kV	Terminals to case，AC 1 minute		2			
Mounting Torque	TOR	kg・cm	Recommend torque：5kg・cm		8			

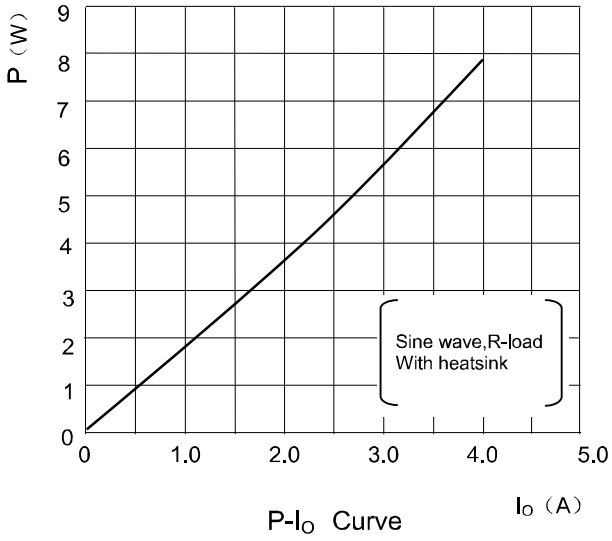
■ Electrical Characteristics（T_a=25℃ Unless otherwise specified）

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	I_{FM}=2A, Pulse measurement, Rating of per diode	1.00
Peak Reverse Current	I_{RRM1}	μA	measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	℃/W	Between junction and ambient ,Without heatsink	55
	$R_{\theta J-L}$		Between junction and lead,Without heatsink	15
	$R_{\theta J-C}$		Between junction and case, With heatsink	1.5

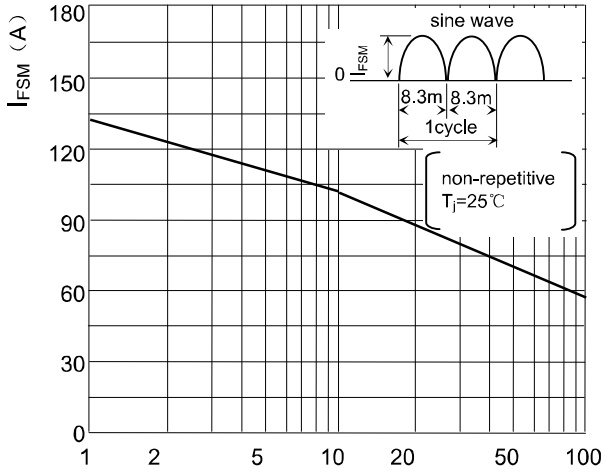
■ Characteristics(Typical)



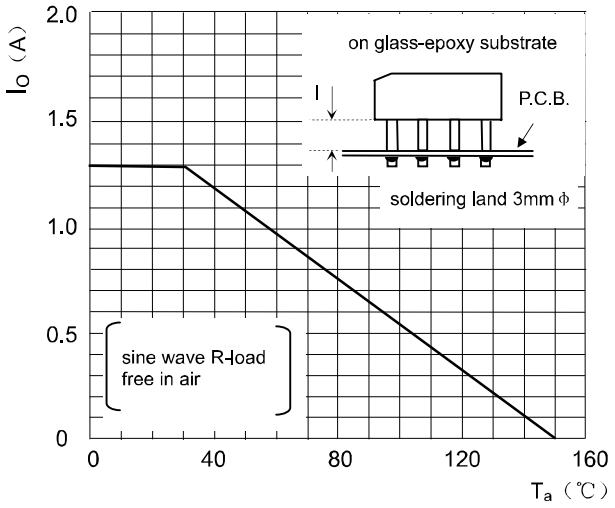
Forward Characteristics



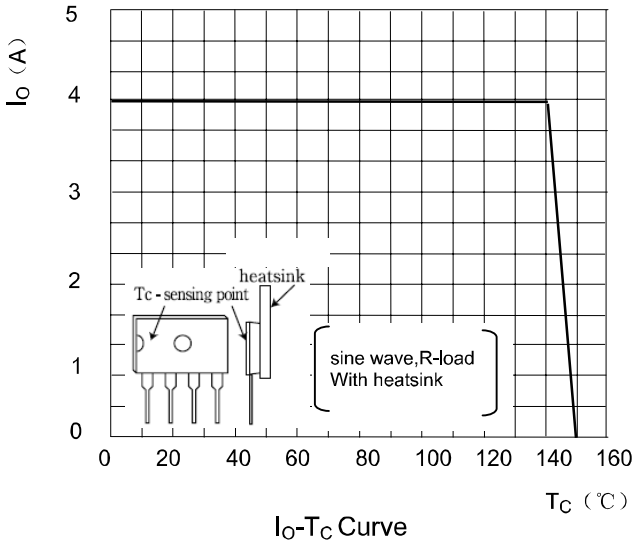
P-I_O Curve



Surge Forward Current Capability Number of Cycles



I_O-T_a Curve



I_O-T_C Curve