SiPower

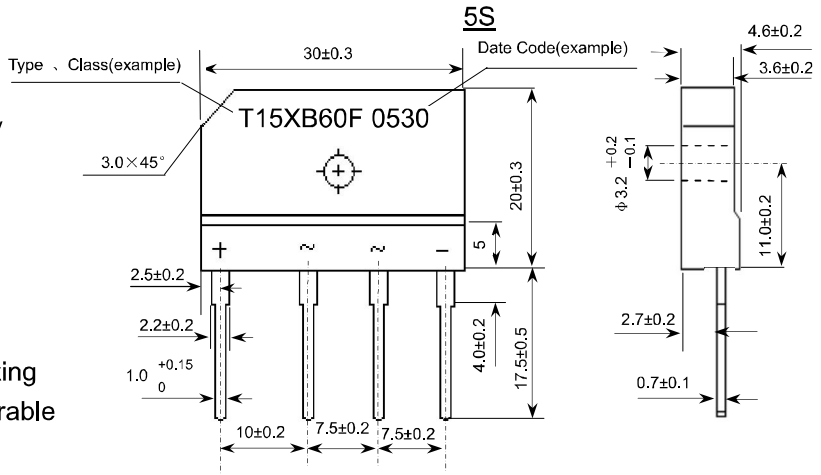
Power Semiconductor Technology

T15XB (20~100)F
Bridge Rectifier

Features

- Io 15A
- VRRM 200V~1000V
- Glass passivated chip
- High surge forward current capability
- Halogen Free product
- Component in accordance to ROHS 2002/95/EC and WEEE2002/96/WC

Package Outline Dimensions in millimeters



Mechanical data

Case: 5S

Epoxy meets UL 94V-0 flammability rating

Terminals: Pure tin plated leads,solderable per J-STD-002 and JESD22-B102, E3 suffix for consumer grade, meet JESD201 class 1A whisker test.

Polarity: As marked on body

Maximum Rating （T_a=25℃ Unless otherwise noted）

Item	Symbol	Unit	Conditions		T15XB				
					20F	40F	60F	80F	100F
Storage Temperature	T_{stg}	℃			-40 ~+150				
Junction Temperature	T_j	℃			+150				
Repetitive Peak Reverse Voltage	V_{RRM}	V			200	400	600	800	1000
Average Rectified Output Current	I_o	A	50H_Z sine wave, R-load	With heatsink T_c=100℃	15.0				
				Without heatsink T_a=25℃	3.2				
Surge(Non-repetitive)Forward Current	I_{FSM}	A	50H_Z sine wave, 1 cycle, T_a=25℃		200				
Dielectric Strength	Vdis	kV	Terminals to case，AC 1 minute		2.5				
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}=7.5A, Pulse measurement, Rating of per diode	1.1
Peak Reverse Current	I_{RRM}	μA	V_{RM}=V_{RRM} , Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	℃/W	Between junction and ambient, Without heatsink	22
	$R_{\theta J-L}$		Between junction and lead, Without heatsink	5
	$R_{\theta J-C}$		Between junction and case, With heatsink	1.5

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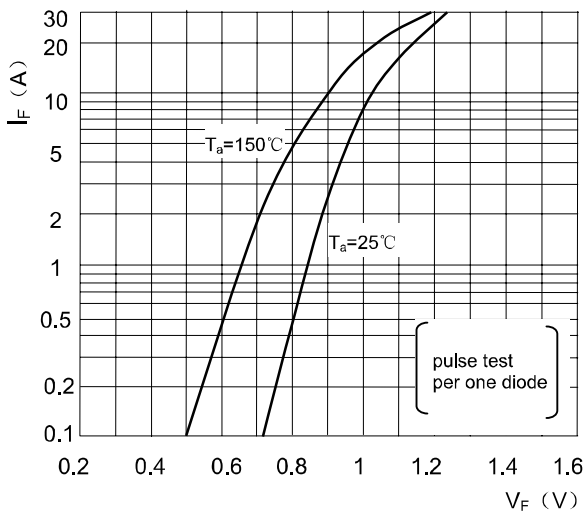
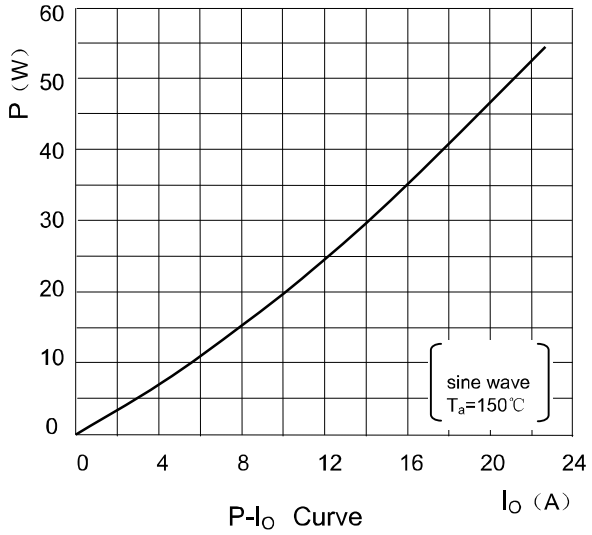
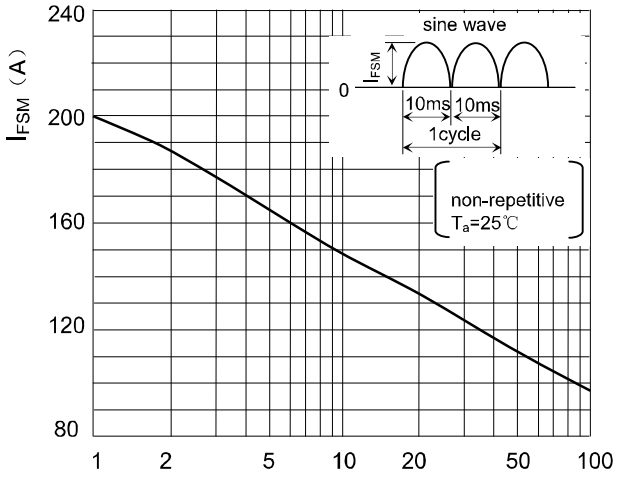
Ratings and Characteristics (T_A = 25 ℃unless otherwise noted)



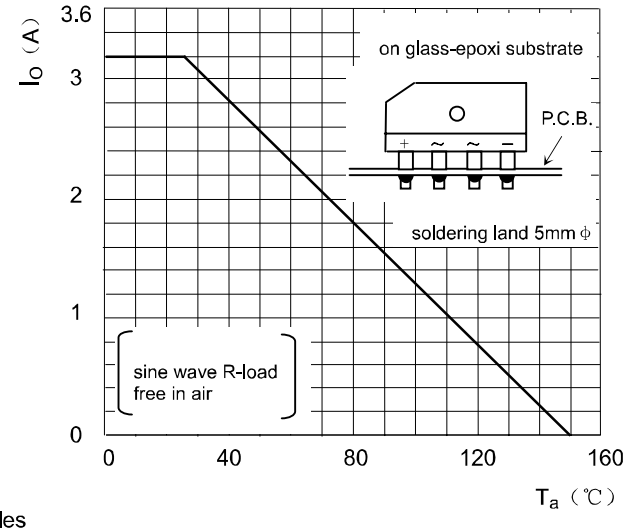
Forward Characteristics



P-I_O Curve



Surge Forward Current Capability



I_O-T_a Curve