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## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# TBS20A THRU TBS20M

## Features

- Glass passivated chip
- High surge forward current capability
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

## Mechanical Data

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
TBS20A	TBS20A	50V	35V	50V
TBS20B	TBS20B	100V	70V	100V
TBS20D	TBS20D	200V	140V	200V
TBS20G	TBS20G	400V	280V	400V
TBS20J	TBS20J	600V	420V	600V
TBS20K	TBS20K	800V	560V	800V
TBS20M	TBS20M	1000V	700V	1000V

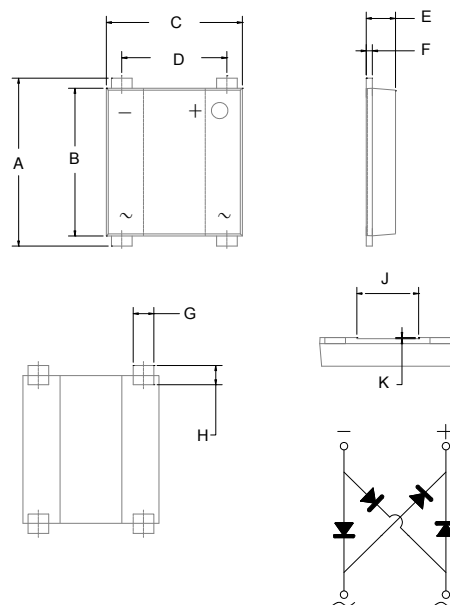
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0 A	$T_c = 110^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	75A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.02V 1.10V	$I_{FM} = 1\text{A};$ $I_{FM} = 2\text{A};$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5uA 500uA	$T_j = 25^\circ\text{C}$ $T_j = 125^\circ\text{C}$
Typical Thermal Resistance	$R_{thJA}$ $R_{thJC}$ $R_{thJL}$	55°C/W 10°C/W 15°C/W	
Rating For Fusing	$I^2t$	23A <sup>2</sup> s	t < 8.30ms

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

## 2.0 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts

### TBS

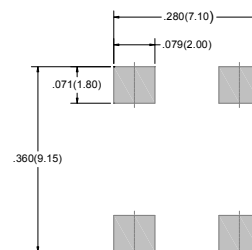


### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.311	.339	7.90	8.60	
B	.283	.291	7.20	7.40	
C	.256	.264	6.50	6.70	
D	.197	.205	5.00	5.20	
E	.051	.059	1.30	1.50	
F	.011	.016	0.27	0.40	
G	.037	.045	0.95	1.15	
H	.028	.041	0.70	1.05	
J	.114	.122	2.90	3.10	
K	.0015	.003	0.04	0.08	

### Mounting Pad Layout

Dimensions in inches and (millimeters)



TBS20A thru TBS20M

FIG1:Io-Tc Curve

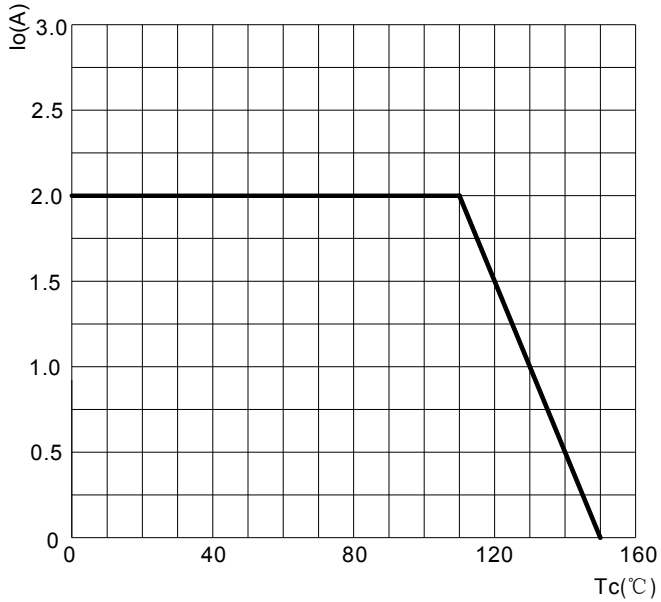


FIG2:Surge Forward Current Capacity

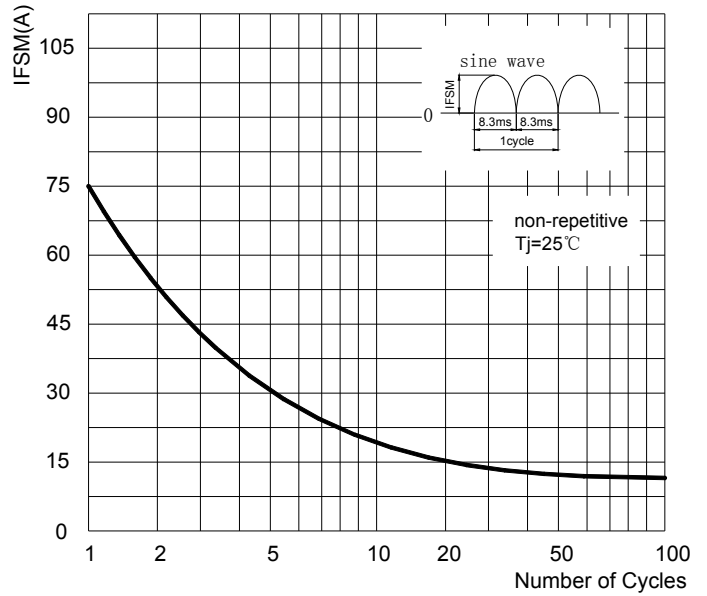


FIG3: Forward Voltage

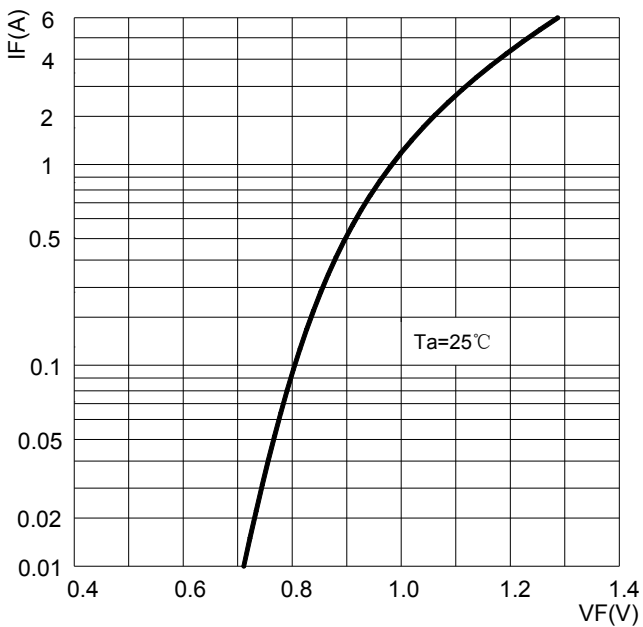
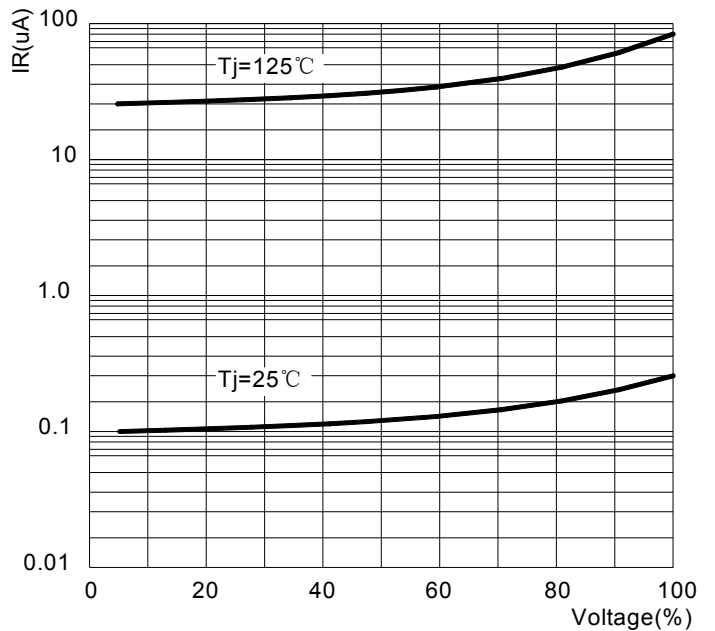


FIG4:Typical Reverse Characteristics



## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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