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# TBS20A **THRU** TBS20M

- 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

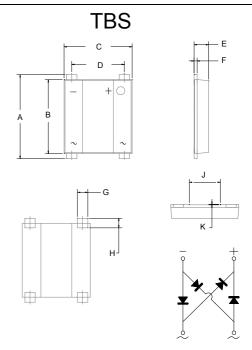
MCC		Maximum	Maximum	Maximum
Part	Device	Recurrent	RMS	DC
Number	Marking	Peak Reverse	Voltage	Blocking
		Voltage		Voltage
TBS20A	TBS20A	50V	35V	50V
TBS20B	TBS20B	100V	70V	100V
TBS20D	TBS20D	200V	140V	200V
TBS20G	TBS20G	400V	280V	400V
TBS20J	TBS20J	600V	420V	600V
TBS20K	TBS20K	800V	560V	800V
TBS20M	TBS20M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

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	2.0 A	Tc=110℃
Peak Forward Surge Current	I <sub>FSM</sub>	75A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_{F}$	1.02V 1.10V	$I_{FM} = 1A;$ $I_{FM} = 2A;$ $T_A = 25^{\circ}C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 5 00μΑ	$T_j = 25 ^{\circ}C$ $T_j = 125 ^{\circ}C$
Typical Thermal Resistance	$egin{aligned} & R_{thJA} \ & R_{thJC} \ & R_{thJL} \end{aligned}$	55°C/W 10°C/W 15°C/W	
Rating For Fusing	l <sup>2</sup> t	23A <sup>2</sup> s	t<8.30ms

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

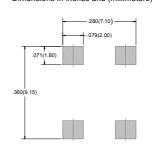
# 2.0 Amp Single Phase **Glass Passivated Bridge Rectifier** 50 to 1000 Volts



DIMENSIONS						
	INCHES		ММ			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.311	.339	7.90	8.60		
В	.283	.291	7.20	7.40		
С	.256	.264	6.50	6.70		
D	.197	.205	5.00	5.20		
Е	.051	.059	1.30	1.50		
F	.011	.016	0.27	0.40		
G	.037	.045	0.95	1.15		
Н	.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:lo-Tc Curve

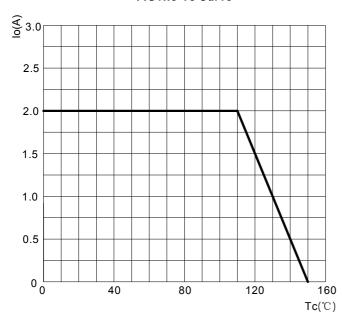


FIG2:Surge Forward Current Capadility

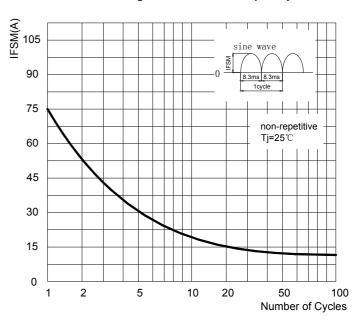


FIG3: Forward Voltage

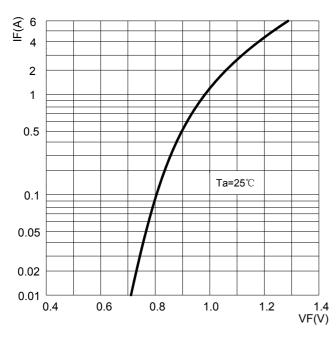
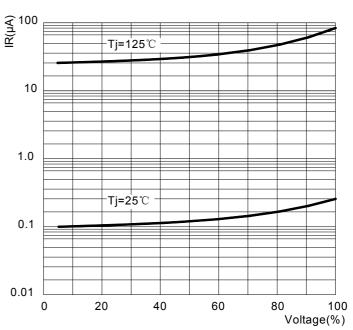


FIG4:Typical Reverse Characteristics





# **Ordering Information**

Device	Packing
(Part Number)-TP	Tape&Reel3Kpcs/Reel

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

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