

## BTA100-800B

### **FEATURES**

- · NPNPN five-layer silicon bidirectional device
- · With TO-P4 packaging
- · Advanced technology to provide customers with high

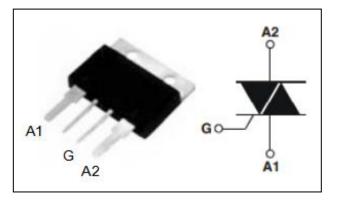
commutation performances

### **APPLICATIONS**

- · General purpose motor control circuits
- · Home appliances
- · Phase control operations in light dimmers and motor speed controllers

#### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	MIN	UNIT
VDRM	Repetitive Peak Off-state Voltage	800	V
V <sub>RRM</sub>	Repetitive Peak Off-state Voltage	800	V
I <sub>T(RMS)</sub>	Non Repetitive Surge Peak On-state Current (full sine wave, $T_c$ = 80°C)	100	A
I <sub>TSM</sub>	Non-repetitive Peak On-state Current f=60Hz	1000	A
I <sub>GM</sub>	Peak Gate Current, tp=20us,TJ = 125°C	8	A
l <sup>2</sup> t	I <sup>2</sup> t Value for Fusing (t=10ms)	6400	A <sup>2</sup> S
$P_{G(AV)}$	Average Gate Power Dissipation T <sub>J</sub> = 125°C	1	w
TJ	Operating Junction Temperature	125	°C
T <sub>stg</sub>	Storage Temperature	-40~150	°C



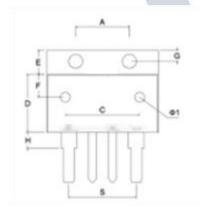


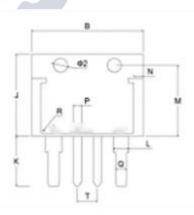
# BTA100-800B

SYMBOL	PARAMETER	1	CONDITIONS	МАХ	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current		V <sub>R</sub> =V <sub>RRM</sub> , T <sub>J</sub> = 125℃	2	mA
I <sub>DRM</sub>	Repetitive peak off-state current		V <sub>D</sub> =V <sub>DRM</sub> , T <sub>J</sub> = 25℃	10	uA
		Ι	V <sub>D</sub> =12V, R <sub>L</sub> = 30 Ω	50	- mA
I <sub>GT</sub>	Gate trigger current	II		50	
		Ш		50	
		IV 🛞		100	
Ін	Holding current		I <sub>GT</sub> = 500mA	80	mA
$V_{\text{GT}}$	Gate trigger voltage all qu	adrant	$V_D=12V, R_L=30 \Omega$	1.5	V
V <sub>TM</sub>	On-state voltage		I <sub>T</sub> = 82A, t <sub>p</sub> = 380us	1.55	V

### **ELECTRICAL CHARACTERISTICS (Tc=25**°C unless otherwise specified)

### PACKAGE OUTLINE Dimensions in mm





Dimension	Millimeter		
Dimension	Min	Max	
A	15.43	16.76	
В	32.00	32.30	
С	21.30	21.90	
D	16.65	17.98	
E	6.83	8.06	
F	6.60	7.00	
G	3.15	3.45	
н	4.57	5.44	
J	24.06	25.38	
к	14.16	15.36	
L	4.47	5.23	
M	20.76	22.10	
N	2.68	3.43	
Р	2.35	2.77	
Q	2.89	3.35	
R	1.45	1.55	
S	19.95	20.05	
Т	5.95	6.05	
F1	2.78	4.01	
F2	3.95	5.19	



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