

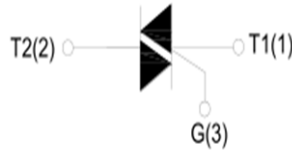
东莞市环昕微实业有限公司

BTA26. PDF

T0-3P

Features

- ▣ IT(RMS): 25A
- ▣ VDRM VRRM:
600V/800V /1000V
1200V/1600V



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value
I_T (RMS)	RMS on-state current	25A
VDRM	Repetitive peak off-state voltage	600V/800V/1000V/1200V/1600V
VRRM	Repetitive peak reverse voltage	600V/800V/1000V/1200V/1600V
T_j	Operating junction temperature range	$\sim 40^{\circ}\text{C} \sim 125^{\circ}\text{C}$
T_{stg}	Storage junction temperature range	$\sim 40^{\circ}\text{C} \sim 150^{\circ}\text{C}$
VDSM	Non repetitive surge peak Off-state voltage	VDRM+100V
VRSM	Non repetitive peak reverse voltage	VRRM+100V
ITSM	Non repetitive surge peak on-state current (full cycle, F=50Hz)	250A
$I^2 t$	$I^2 t$ value for fusing ($t_p=10\text{ms}$)	340A ² S
dI/dt	Critical rate of rise of on-state current ($I_G = 2 \times I_{GT}$)	50A/ μ s
IGM	Peak gate current	4A
PG(AV)	Average gate power dissipation	1W
PGM	Peak gate power	10W

ELECTRICAL CHARACTERISTICS ($T_j = 25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value			
			BTA26/600V-800V		BTA26/1200V/1600V	
IGT	VD=12V RL=33 Ω	I - II - III	<50mA	<35mA	<50mA	<35mA
		IV	/	/	/	/
VGT		ALL	<1.3V		<1.5V	
VGD	VD=VDRM Tj=125 $^{\circ}\text{C}$ RL=3.3K Ω	ALL	>0.2V			
IL	IG=1.2IGT	I - III	<80mA	<70mA	<90mA	<70mA
		II	<100mA	<80mA	<100mA	<80mA
		I - III - IV	/	/	/	/
		II	/	/	/	/
IH	IT=100mA		<75mA	<50mA	<80mA	<60mA
dV/dt	VD=2/3VDRM Gate Open Tj=125 $^{\circ}\text{C}$		>1000V/ μ s	>500V/ μ s	>1500V/ μ s	>1000V/ μ s
VTM	ITM=35A tp=380 μ s (Tj =25 $^{\circ}\text{C}$)		<1.5V			
IDRM	VD=VDRMVR=VR	Tj =25 $^{\circ}\text{C}$	<5 μ A			
IRRM	RM	Tj =125 $^{\circ}\text{C}$	<3mA			
Rth(j-c)	junction to case (AC)	T0-3P	0.67 $^{\circ}\text{C}/\text{W}$			

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FIG. 1 Maximum power dissipation versus RMS on-state current

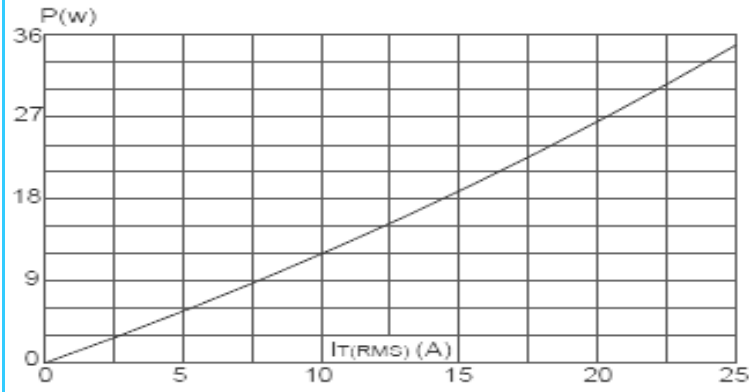


FIG. 2: RMS on-state current versus case temperature

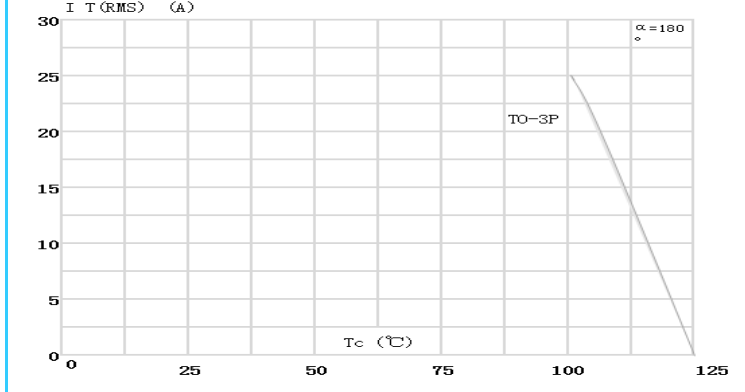


FIG. 3: Surge peak on-state current versus number of cycles

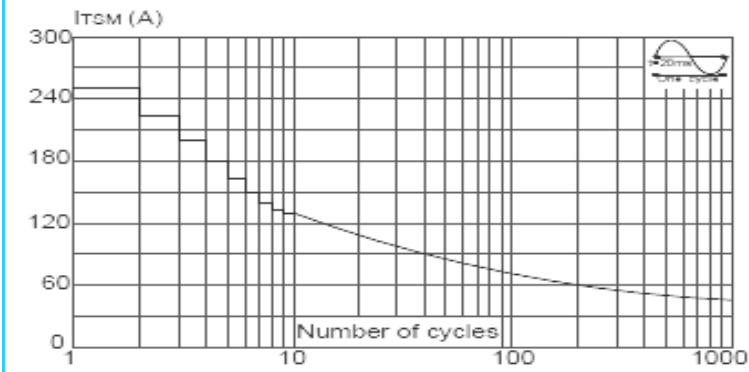


FIG. 4: On-state characteristics (maximum values)

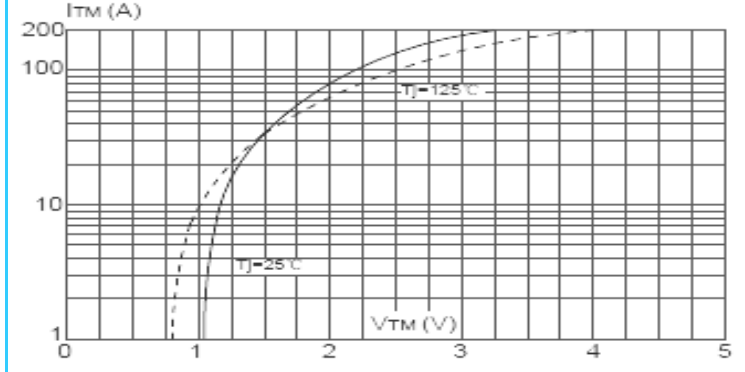


FIG. 5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 20\text{ms}$, and corresponding value of $I^2 t$ ($dI/dt < 50\text{A}/\mu\text{s}$)

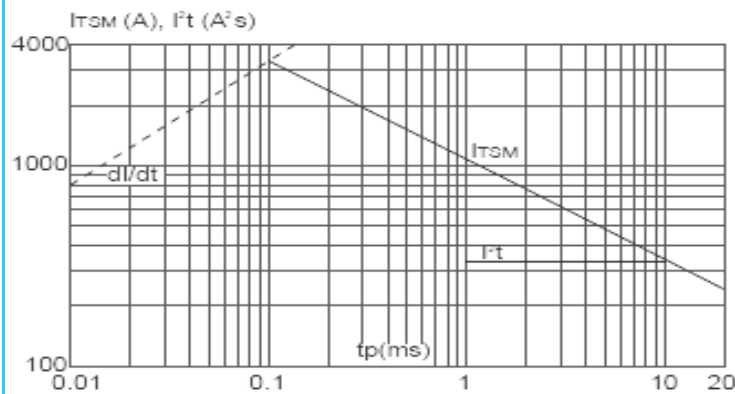
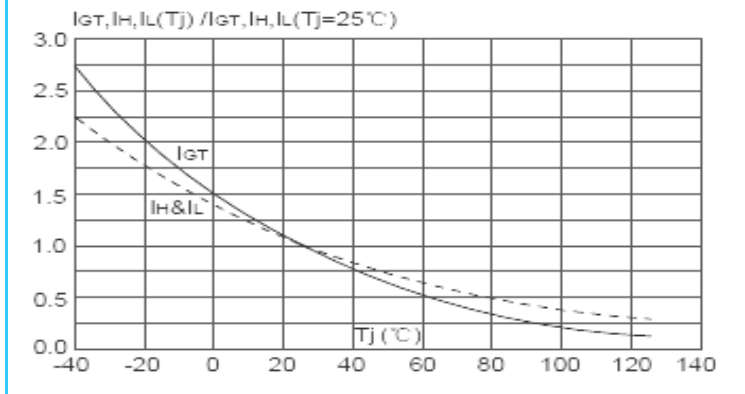


FIG. 6: Relative variations of gate trigger current, holding current and latching current versus junction temperature



PACKAGE MECHANICAL DATA

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	1.45		1.55	0.057		0.061
C	14.35		15.60	0.565		0.614
D	0.50		0.70	0.020		0.028
E	2.70		2.90	0.106		0.114
F	15.80		16.50	0.622		0.650
G	20.40		21.10	0.803		0.831
H	15.10		15.50	0.594		0.610
J	5.40		5.65	0.213		0.222
K	1.10		1.40	0.043		0.055
L	1.35		1.50	0.053		0.059
P	2.80		3.00	0.110		0.118
R		4.35			0.171	

