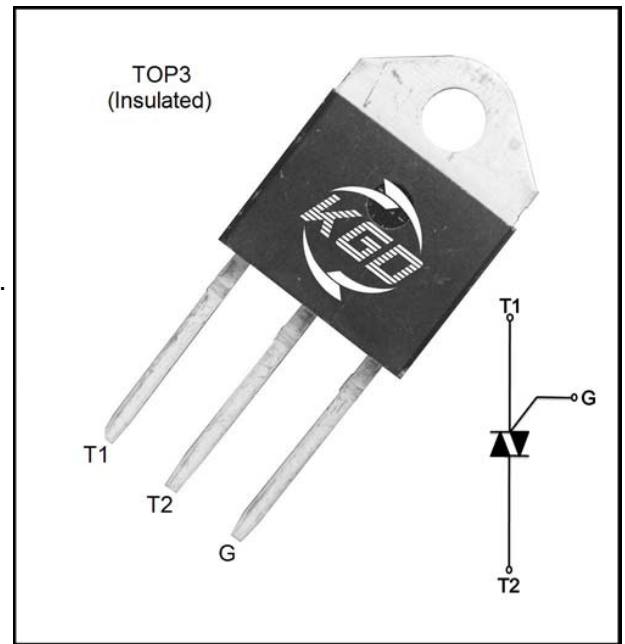


BTA26/BTB26 Series

- **Description:**
High current density due to double mesa technology; SIPOS and Glass Passivation.
- **Applications:**
BTA26 series triacs is suitable for general purpose AC switching. They can be used as an ON/OFF function in applications such as static relays, heating regulation, induction motor starting circuits... or for phase control operation light dimmers, motor speed controllers.
- **Features:**
BTA26 Series are 3 Quadrants TRIACS, They are specially recommended for use on inductive loads. BTA26 are isolated internally, they provide a 2500V RMS isolation voltage from all three terminals to external heatsink. Blocking voltage to 600/800/1000/1200V
On-state RMS current to 25A
Non-repetitive peak on-state current to 250A
- **Absolute Maximum Ratings**



Symbol	Parameter	Conditions	Min	Max	Unit
V_{DRM}	Repetitive peak off-state voltage	$T_J=25^{\circ}C$	600	1200	V
V_{RRM}	Repetitive peak Reverse voltage	$T_J=25^{\circ}C$	600	1200	V
$I_{T(RMS)}$	RMS on-state current (full sine wave)	TOP3 $T_c=100^{\circ}C$	-	25	A
I_{TSM}	Non-repetitive peak On-state current (full cycle, $T_J=25^{\circ}C$)	$F=50Hz, t=20ms$	-	250	A
		$F=60Hz, t=16.7ms$	-	260	A
I^2t	I^2t Value for fusing	$T_p=10ms$	-	340	A^2S
di/dt	Rate of rise of on-state current	$I_G=2 \times I_{GT}, t_r \leq 100ns, T_J=125^{\circ}C$	-	50	$A/\mu s$
I_{GM}	Peak gate current	$t_p=20\mu s, T_J=125^{\circ}C$	-	4	A
$P_{G(AV)}$	Average gate power		-	1	W
T_{STG}	Storage temperature		-40	150	$^{\circ}C$
T_J	Junction temperature		-40	125	$^{\circ}C$

BTA26/BTB26 Series
● Electrical Characteristics
■ 3 Quadrants

Symbol	Conditions	Quadrant	BTA26/BTB26		Unit	
			CW	BW		
I_{GT}	$V_D=12V, R_L=33\Omega$	I-II-III	MAX	35	50	mA
V_{GT}		I-II-III	MAX	1.3		V
V_{GD}	$V_D=V_{DRM}, R_L=3.3K\Omega, T_j=125^\circ C$	I-II-III	MIN	0.2		V
I_L	$I_T=1.2I_{GT}$	I-III	MAX	70	80	mA
		II	MAX	80	120	
I_H	$I_T=100mA$		MAX	50	70	mA
dv/dt	$V_{DM}=67\%V_{DRM}, \text{gate open}, T_j=125^\circ C$		MIN	500	1000	V/ μs
(di/dt) _c	Without snubber, $T_j=125^\circ C$		MIN	13	22	A/ms

■ 4 Quadrants

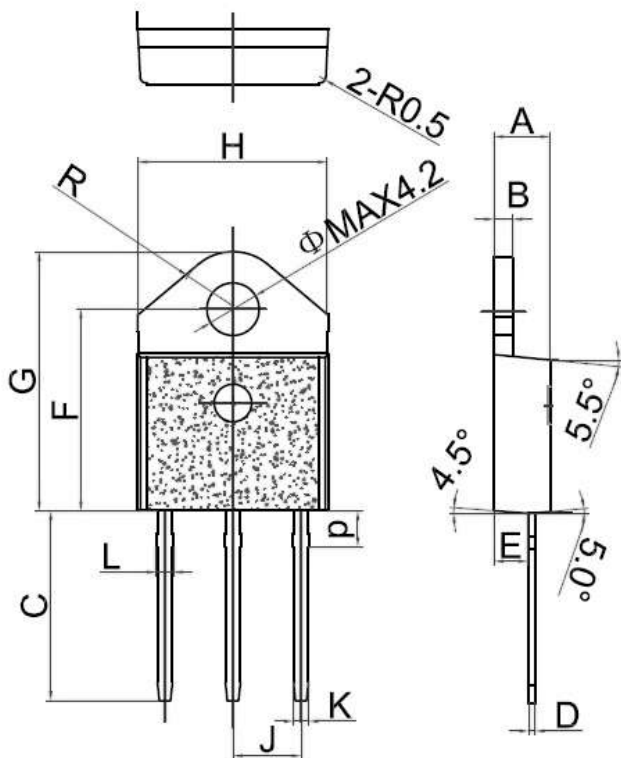
Symbol	Conditions	Quadrant	BTA26/BTB26		Unit	
			C	B		
I_{GT}	$V_D=12V, R_L=33\Omega$	I-II-III	MAX	25	50	mA
		IV		50	100	
V_{GT}		ALL	MAX	1.3		V
V_{GD}	$V_D=V_{DRM}, R_L=3.3K\Omega, T_j=125^\circ C$	ALL	MIN	0.2		V
I_L	$I_T=1.2I_{GT}$	I-III-IV	MAX	70	80	mA
		II	MAX	80	120	
I_H	$I_T=100mA$		MAX	50	70	mA
dv/dt	$V_{DM}=67\%V_{DRM}, \text{gate open}, T_j=125^\circ C$		MIN	500	1000	V/ μs

BTA26/BTB26 Series
● Static Characteristics

Symbol	Conditions	Quadrant		Value	Unit
V_{TM}	$I_T=35A, t_p=380\mu s$	$T_J=25^\circ C$	MAX	1.55	V
I_{DRM}	$V_D=V_{DRM}, V_R=V_{RRM}$	$T_J=25^\circ C$	MAX	10	μA
I_{RRM}		$T_J=125^\circ C$	MAX	2	mA

● Thermal Characteristics

Symbol	Parameter	Value	Unit
$R_{th(j-mb)}$	Junction to Case(AC)	TOP3	1.7 $^\circ C/W$
$R_{th(j-a)}$	Junction to ambient	TOP3	60 $^\circ C/W$

● Package Outline Dimensions
TOP3(TO-218)


Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.4		4.6	0.173		0.181
B	1.45		1.55	0.057		0.061
C	14.35		15.6	0.565		0.614
D	0.5		0.7	0.020		0.028
E	2.7		2.9	0.106		0.114
F	15.8		16.5	0.622		0.650
G	20.4		21.1	0.815		0.831
H	15.1		15.5	0.594		0.610
J	5.4		5.65	0.213		0.222
K	1.2		1.4	0.047		0.055
L	1.35		1.50	0.053		0.059
P	2.8		3.0	0.110		0.118
R		4.6			0.181	