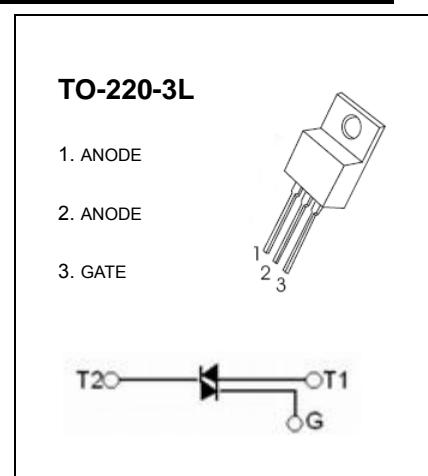


TO-220-3L Plastic-Encapsulate Thyristors

BTB04 TRIAC

MAIN FEATURES

Symbol	value		unit
I_T (RMS)	4		A
V_{DRM}/V_{RRM}	BTB04-400	BTB04-600	V
	400	600	
I_{GT}	5 to 25		mA



DESCRIPTION

The BTB04 triac family are high performance glass passivated PNPN devices. These parts are suitable for general purpose applications where gate high sensitivity is required. Application on 4Q such as phase control and static switching.

ABSOLUTE RATINGS (limiting values)

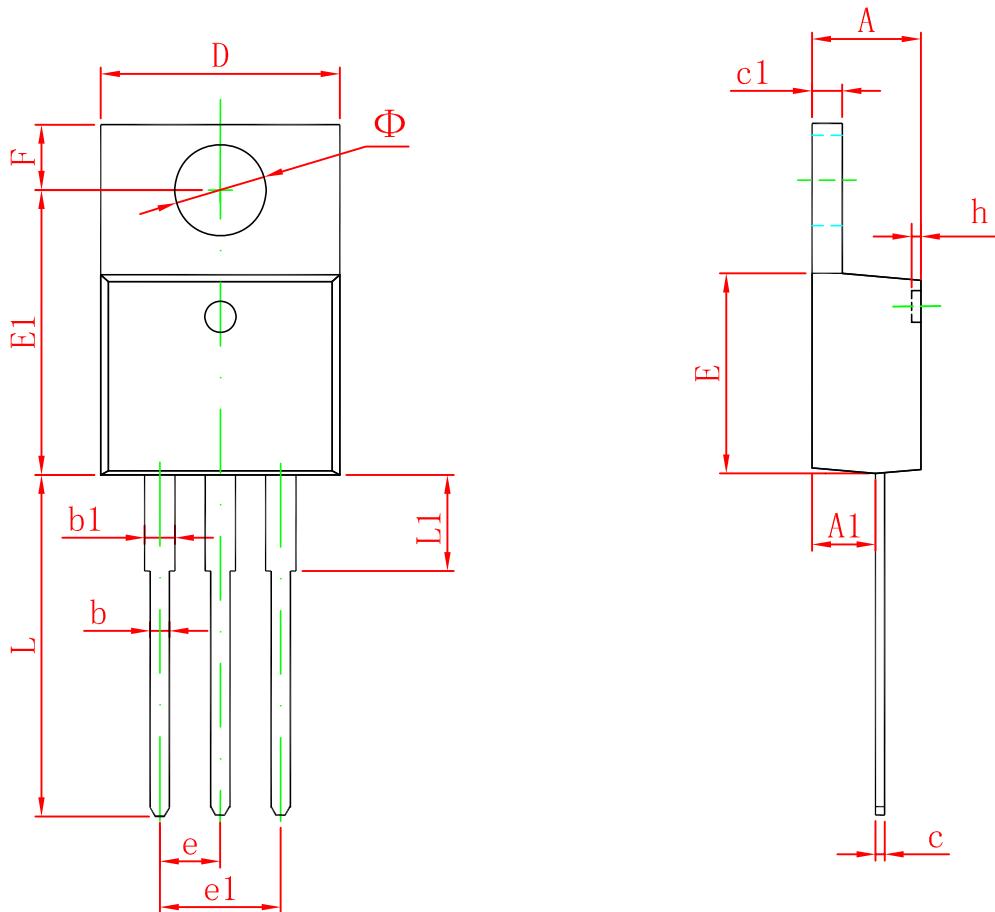
Symbol	Parameter		Value		Unit
I_T (RMS)	RMS on-state current (360° conduction angle)		$T_C=95^\circ\text{C}$		A
I_{TSM}	Non repetitive surge peak on-state current(T_j initial=25°C)		tp=8.3ms	42	A
			tp=10ms	40	
P_D	Power dissipation		2		W
$R_{th j-a}$	Thermal Resistance.Junction to Ambient Air		62.5		°C/W
V_{DRM} V_{RRM}	Repetitive peak off-state/reverse voltage		BTB04-400	BTB04-600	V
			400	600	
T_{stg} / T_j	Storage and operating junction temperature range		-40 ~ +150		°C

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

Symbol	Parameter		Test conditions	T	D	S	A	Unit	
I_{GT}	Gate trigger current	I - II - III	$V_D=12\text{V(DC)}$, $R_L=33\Omega$	MAX	5	5	10	10	mA
		IV		MAX	5	10	10	25	
V_{GT}	Gate trigger voltage	I - II - III - IV	$V_D=12\text{V(DC)}$, $R_L=33\Omega$	MAX		1.5			V
I_{H^+}	Holding current		$I_T = 100\text{mA}$, Gate open	MAX	15	15	25	25	mA
V_{TM^*}	On-state voltage		$I_{TM}=5.5\text{A}$, tp=380μs	MAX	1.65				V
I_{DRM} I_{RRM}	Rated repetitive peak off-state current		V_{DRM} rated V_{RRM} rated	MAX	0.01				mA

*For either polarity of electrode A₂ voltage with reference to electrode A₁.

TO-220-3L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	4.470	4.670	0.176	0.184
A1	2.520	2.820	0.099	0.111
b	0.710	0.910	0.028	0.036
b1	1.170	1.370	0.046	0.054
c	0.310	0.530	0.012	0.021
c1	1.170	1.370	0.046	0.054
D	10.010	10.310	0.394	0.406
E	8.500	8.900	0.335	0.350
E1	12.060	12.460	0.475	0.491
e	2.540 TYP		0.100 TYP	
e1	4.980	5.180	0.196	0.204
F	2.590	2.890	0.102	0.114
h	0.000	0.300	0.000	0.012
L	13.400	13.800	0.528	0.543
L1	3.560	3.960	0.140	0.156
Φ	3.735	3.935	0.147	0.155