



BTA04A_BT B04A Triac

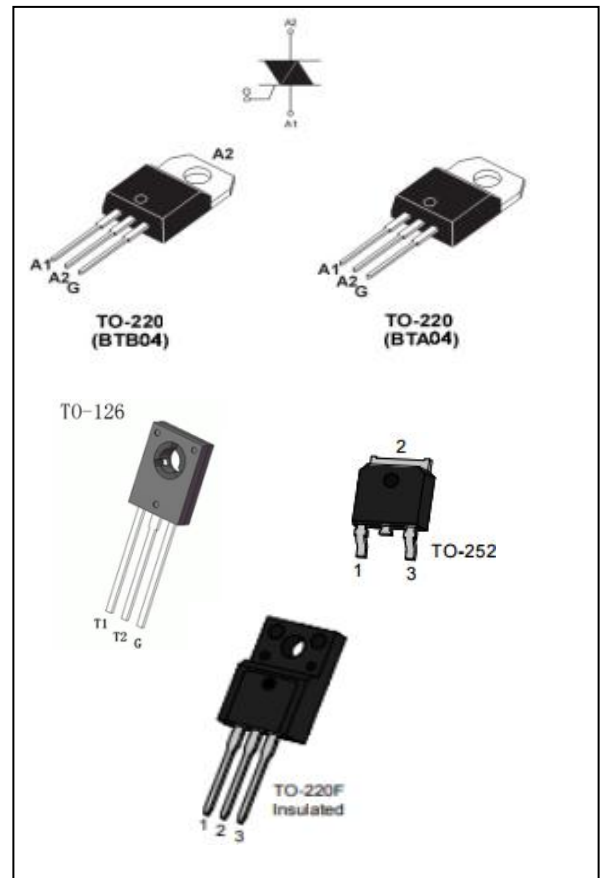
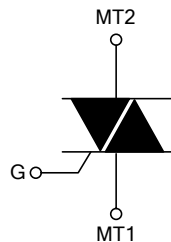
DESCRIPTION

The BTA04A_BT B04A is a silicon bidirectional device with NPNPN five-layer structure; Single-sided grooving technology with independent intellectual property rights, countertop glass passivation process; Multilayer metallized electrode on the back; It has high blocking voltage and high temperature stability;

The BTA04A_BT B04A is widely used in dimming, temperature regulation, speed regulation, and electric vehicles Tools, solid state relays, vacuum cleaners, motor controls system and other fields, strong anti-interference ability.

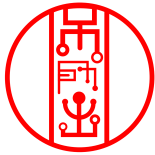
FEATURES

- * Low gate trigger current
- * Low holding current



ABSOLUTE MAXIMUM RATINGS

SYMBOL	PARAMETER			RATINGS	UNIT
$I_{T(RMS)}$	RMS On-State Current	BTA BTB	$T_c=80^{\circ}C$ $T_c=90^{\circ}C$	4	A
I_{TSM}	Non Repetitive Surge Peak On-State Current	F=50HZ	$t=20ms$	40	A
I^2t	I^2t Value	$t_p=10ms$		8	A^2S
di/dt	Critical Rate of Rise of On-State Current		$T_j=125^{\circ}C$	50	A/us
V_{DRM}/V_{RRM}	Repetitive Peak Off-State Voltage		$T_j=25^{\circ}C$	600/800	V



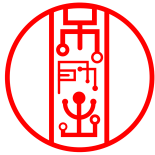
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I_{GM}	Peak Gate Current	$t_p=20\mu s$	$T_j=125^\circ C$	4	A
$P_{G(AV)}$	Average Gate Power Dissipation		$T_j=125^\circ C$	0.5	W
T_{stg} T_j	Storage Junction Temperature Operating Junction Temperature			$-40\text{to}+150$ $-40\text{to}+125$	$^\circ C$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ Electrical characteristics (three quadrants)

PARAMETER	SYMBOL	TEST CONDITIONS	Quadrants		RATINGS	UNIT
Gate Trigger Current	I _{GT}	V _D =12V (DC) R _L =100Ω	I II III	MAX	≦35	mA
Gate Trigger Voltage	V _{GT}			MAX	1.5	V
GateNon-Trigger Voltage	V _{GD}	T _j =125℃		MIN	0.2	V
HoldingCurrent (Note 1)	I _H	I _T =0.5A		MAX	20	mA
Latching Current	I _L	I _G =1.2I _{GT}		MAX	5	mA
					30	
Critical Rate of Rise of Off-State Voltage (Note 1)	dv/dt	V _D =2/3V _{DRM} T _j =125℃		MIN	500	V/us
Critical Rate of Rise of Off-State Voltage at Commutation (Note 1)	(dv/dt) _c	T _j =125℃		MIN	10	V/us



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■ Electrical characteristics (four quadrants)

PARAMETER	SYMBOL	TEST CONDITIONS	Quadrants		RATINGS		UNIT
Gate Trigger Current	I_{GT}	$V_D=12V$ $R_L=100\ \Omega$	I II III IV	MAX	I II III	IV	mA
					≤ 35	≤ 80	
Gate Trigger Voltage	V_{GT}			MAX	1.5		V
GateNon-Trigger Voltage	V_{GD}	$T_j=125^{\circ}C$		MIN	0.2		V
HoldingCurrent (Note 1)	I_H	$I_T=0.5A$		MAX	60		mA
Latching Current	I_L	$I_G=1.2I_{GT}$		MAX	60	mA	
		100					
Critical Rate of Rise of Off-State Voltage (Note 1)	dv/dt	$V_D=2/3V_{DRM}$ $T_j=125^{\circ}C$		MIN	500		V/us
Critical Rate of Rise of Off-State Voltage at Commutation (Note 1)	$(dv/dt)_c$	$T_j=125^{\circ}C$		MIN	10		V/us

■ Static parameters

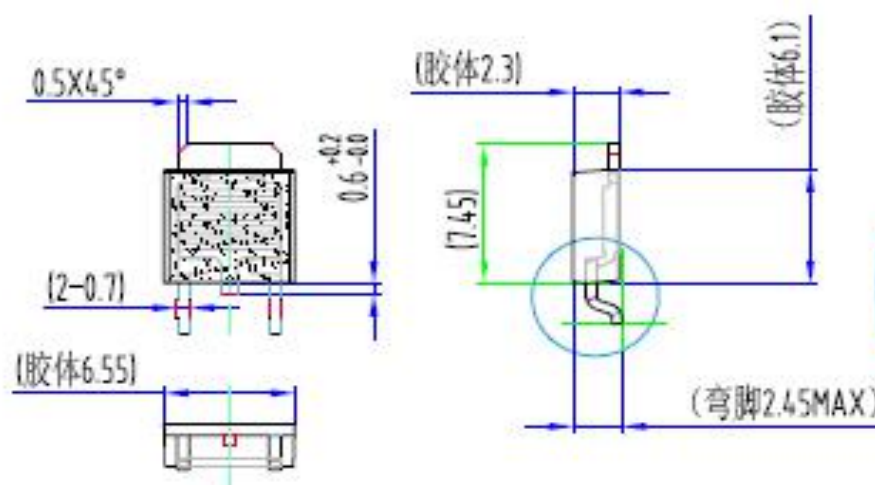
SYMBOL	PARAMETER			RATINGS	UNIT
V _{TM}	Peak On-State Voltage (Note 1)	T _j =25℃ I _{TM} =8A	MAX	1.50	V
V _{T0}	Threshold voltage	T _j =125℃	MAX	0.92	V
R _d	Resistance	T _j =125℃	MAX	36.6	m Ω
I _{DRM} I _{RRM}	Repetitive Peak Off-State Current	T _j =25℃	MAX	5	uA
		T _j =125℃		0.5	mA
R _{th(j-c)}	Junction to Case (DC)	BTA		2.05	℃/W
		BTB		1.25	

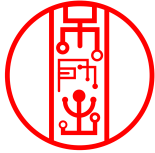


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●T0-252 外形尺寸图:

单位: mm(± 0.1)





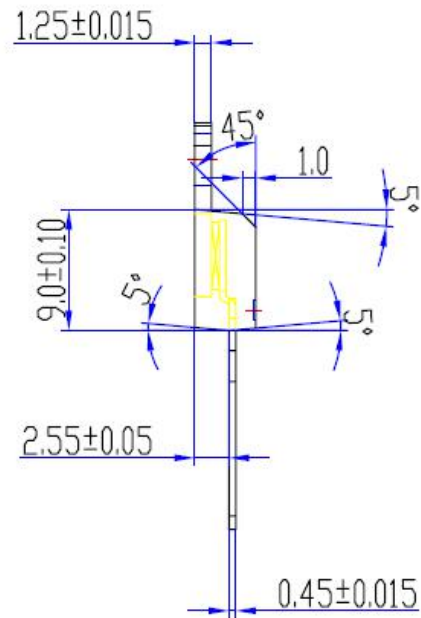
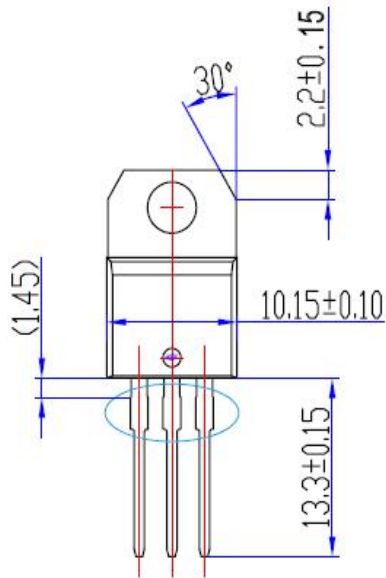
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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

TO-220

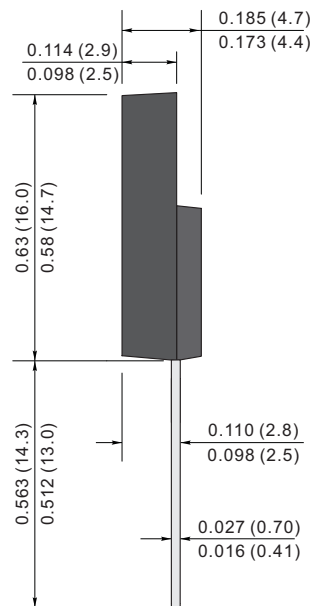
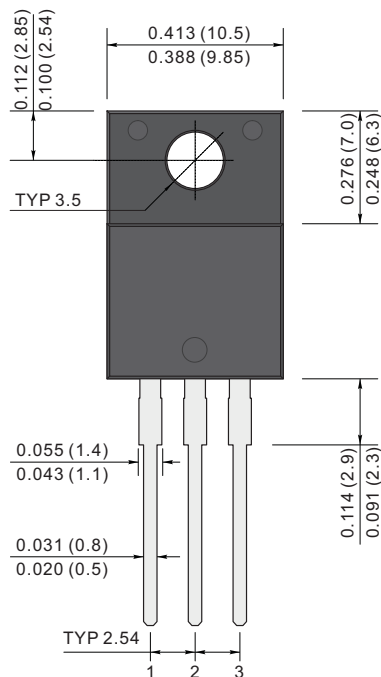
● 单位: mm (±0.1)



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

TO-220F



Unit: inch (mm)



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●TO-126 外形尺寸图:

单位: mm(± 0.1)

