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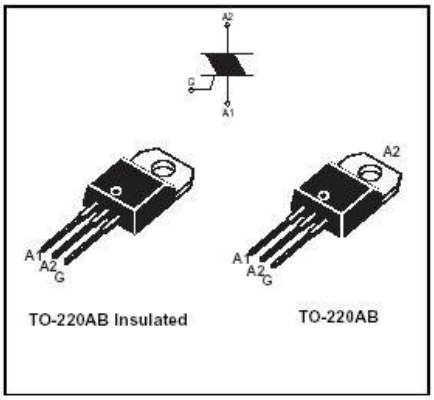
Otomo Semiconductor (Shenzhen) Co., Ltd.

BTA/BTB16(16A TRIACS)

MAIN FEATURES:

Symbol	Value	Unit
$I_{T(RMS)}$	16	A
V_{DRM}/V_{RRM}	600 and 800	V
$I_{G(Q1)}$	10 to 50	mA



ABSOLUTE RATING

Symbol	Parameter			Value	Units
$I_{T(RMS)}$	RMS on-state current(full sine wave)	TO-220AB	T_C=100℃	16	A
		TO-220AB Ins.	T_C=85℃		
I_{TSM}	Non-repetive peak on-state current (T_j=25℃, full cycle)	F=50Hz	t=20ms	160	A
		F=60Hz	t=16.7ms	168	
dI/dt	Critical rate of rise of on-state current I_G=2×I_{GT}, tr≤100ns	F=120Hz	T_j=125℃	50	A/μs
I_{GM}	Peak gate current	tp=20 μs	T_j=125℃	4	A
$P_{G(AV)}$	Average gate power dissipation		T_j=125℃	1	W
T_{stg}	Storage junction temperature range			-40～150	℃
T_j	Operating junction temperature range			-40～150	℃

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THERMAL RESISTANCE

Symbol	Parameter		Value	Unit
Rth(j-c)	Junction to case	TO-220AB	1.2	˚C/W
		TO-220 Ins.	2.1	
Rth(j-a)	Junction to ambient	TO-220AB	60	˚C/W
		TO-220 Ins.		

ELECTRICAL CHARACTERISTICS (T_j=25˚C unless otherwise stated)

Symbol	Testing conditions	Quadrant		Suffix					Unit
				SW	CW	BW	C	B	
I_{GT}	V_D=12V, R_L=33Ω	Ⅰ-Ⅱ-Ⅲ	Max	10	35	50	25	50	mA
		Ⅳ		-	-	-	50	100	
V_{GT}		ALL	Max	1.3					V
V_{GD}	V_D=V_{DRM}, R_L=3.3K Ω, T_j=125˚C	ALL	Min	0.2					V
I_L	I_G=1.2I_{GT}	Ⅰ-Ⅲ	Max	25	50	70	40	50	mA
		Ⅱ		30	60	80	80	100	
I_H	I_T=500mA	ALL	Max	15	35	50	25	50	mA
V_{TM}	I_T=17A, t=380μ s, T_j=25˚C	ALL	Max	1.55					V
I_{DRM} I_{RRM}	V_{DRM}=V_{RRM} T_j=25˚C		Max	5					μ A
	T_j=125˚C			2					mA
dv/dt	V_D=67% V_{DRM} Gate open T_j=125˚C		Min	40	500	1000	200	400	V/μ s