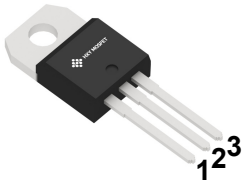
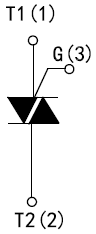
Description

High current density due to double mess technology, SIPOS and Glass passivation. BTA24-600BWRG series triacs is suitable for general purpose AC switching. They can be used as an ON/OFF function is applications such as static relays, heating regulation, induction motor stating circuits or phase control operation light dimmers, motor speed controllers.
BTA24-600BWRG series are 3 Quadrants triacs, They are specially recommended for use on inductive loads.



TO-220A



Absolute Maximum Ratings (T_a=25°C unless otherwise noted)

Symbol	Parameter	Test condition	Value	Unit
V_{DRM}/ V_{RRM}	Repetitive peak off-state voltage	T_j=25°C	600	V
V_{DSM}	Non repetitive surge peak off-state voltage	T_P =10ms,T_j=25°C	700	V
V_{RSM}	Non repetitive peak reverse voltage	T_P =10ms,T_j=25°C	700	V
$I_{T(RMS)}$	RMS on-state current	Tc=90°C Tc=70°C	20	A
I_{TSM}	Non repetitive surge peak on-state current	F=60Hz, t=16.7ms	210	A
		F=50Hz, t=20ms	200	
I^2t	I^2t value	tp=10ms	200	A^2s
dI/dt	Critical rate of rise of on-state current	I_G=2*I_{GT}, tr≤10ns, F=120Hz, T_j=125°C	100	A/μs
I_{GM}	Peak gate current	tp=20μs, T_j=125°C	4	A
P_{GM}	Peak gate power dissipation	tp=20μs, T_j=125°C	10	W
$P_{G(AV)}$	Average gate power	T_j=125°C	1	W
T_{STG}	Storage temperature		-40~+150	°C
T_j	Operating junction temperature		-40~+125	

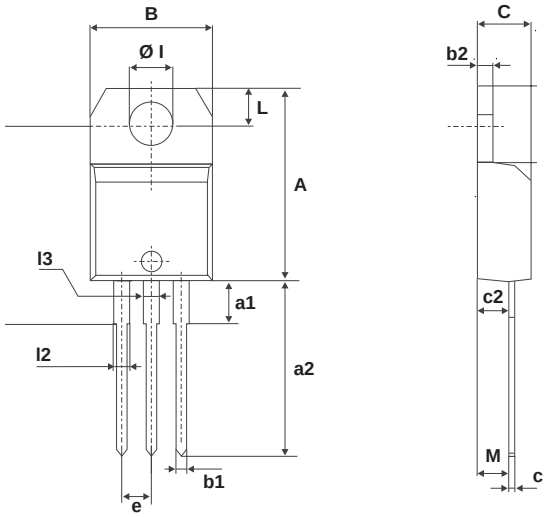
Electrical Characteristics (T_j =25°C unless otherwise specified)

Symbol	Parameter	Test condition			Value	Unit
I_{GT}	Gate trigger current	V_D=12V, R_L=33Ω,	Ⅰ-Ⅱ-Ⅲ	Max	50	mA
V_{GT}	Gate trigger voltage		Ⅰ-Ⅱ-Ⅲ	Max	1.5	V
V_{GD}	Non-triggering gate voltage	V_D =V_{DRW}, T_j=125°C R_L=3.3KΩ		Min	0.2	V
I_H	Holding current	I_T=100mA,		Max	60	mA
I_L	Latching current	I_G=1.2I_{GT},	Ⅰ-Ⅲ	Max	70	
			Ⅱ	Max	80	
D_V/dt	Critical rate of rise of off-state	V_D=67%V_{DRM}, Gate Open T_j=125°C		Min	500	V/μs
(D_V/dt)c	Critical rate of rise of off-state	(dI/dt)c=8.8A/ms T_j=125°C		Min	12.5	V/μs
V_{TM}	On-state Voltage	I_{TM}=28 A ,tp=380μs , T_j=25 °C			1.55	V
I_{DRM} / I_{RRM}	Repetitive peak off-state current	V_D=V_{DRM}/V_{RRM}, T_j=25°C			5	μA
		V_D=V_{DRM}/V_{RRM},T_j=125°C			2.5	mA

Static Characteristics

Symbol	Parameter	Value	Unit
Rth (j-c)	Junction to case (AC)	2.1	°C/W

Package Information
TO-220A



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	15.20		15.90	0.598		0.625
a1		3.75			0.147	
a2	13.00		14.00	0.511		0.551
B	10.00		10.40	0.393		0.409
b1	0.61		0.88	0.024		0.034
b2	1.23		1.32	0.048		0.051
C	4.40		4.60	0.173		0.181
c1	0.49		0.70	0.019		0.027
c2	2.40		2.72	0.094		0.107
e	2.40		2.70	0.094		0.106
F	6.20		6.60	0.244		0.259
ØI	3.75		3.85	0.147		0.151
I4	15.80	16.40	16.80	0.622	0.646	0.661
L	2.65		2.95	0.104		0.116
I2	1.14		1.70	0.044		0.066
I3	1.14		1.70	0.044		0.066
M		2.60			0.102	

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