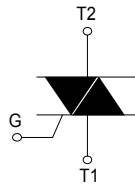
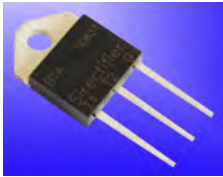
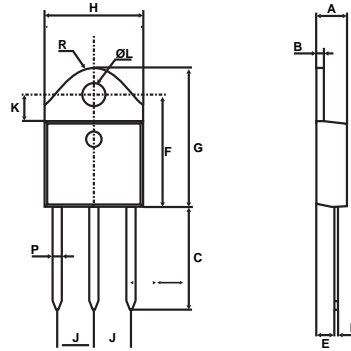


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Discrete Triacs(Isolated)



Dimensions 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		15.60	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	3.4		3.65	0.134		0.144
ØL	4.08		4.17	0.161		0.164
P	1.20		1.40	0.047		0.055
R		4.60			0.181	

Type	V _{RSM}	V _{RRM}	V _{DSM}	V _{DRM}
	V	V	V	V
BTA26-400	500	400		
BTA26-600	700	600		
BTA26-800	900	800		
BTA26-1000	1100	1000		
BTA26-1200	1300	1200		

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
I _{T(RMS)}	RMS on-state current (full sine wave) TO-218 T _c = 100°C	25	A
I _{TSM}	Non repetitive surge peak on-state current (full cycle, T _j initial = 25°C)	F = 60 Hz t = 16.7 ms F = 50 Hz t = 20 ms	250 260
I ² t	I ² t Value for fusing tp = 10 ms	340	A ² s
di/dt	Critical rate of rise of on-state current I _G = 2 x I _{GT} , tr ≤ 100 ns F = 120 Hz T _j = 125°C	50	A/μs
V _{DSM} /V _{RSM}	Non repetitive surge peak off-state voltage tp = 10 ms T _j = 25°C	V _{DRM} /V _{RRM} + 100	V
I _{GM}	Peak gate current tp = 20 μs T _j = 125°C	4	A
P _{G(AV)}	Average gate power dissipation T _j = 125°C	1	W
T _{stg} T _j	Storage junction temperature range Operating junction temperature range	- 40 to + 150 - 40 to + 125	°C

ELECTRICAL CHARACTERISTICS (T_j = 25°C, unless otherwise specified)

■ SNUBBERLESS and LOGIC LEVEL(3 Quadrants)

Symbol	Test Conditions	Quadrant	BTA		Unit	
			CW	BW		
I _{GT}	V _D = 12 V R _L = 33 Ω	I - II - III	MAX.	35	50	mA
V _{GT}		I - II - III	MAX.	1.3		V
V _{GD}	V _D = V _{DRM} R _L = 3.3 kΩ T _j = 125°C	I - II - III	MIN.	0.2		V
I _H	I _T = 500 mA		MAX.	50	75	mA
I _L	I _G = 1.2 I _{GT}	I - III	MAX.	70	80	mA
		II		80	100	
dV/dt	V _D = 67 % V _{DRM} gate open T _j = 125°C		MIN.	500	1000	V/μs
(di/dt) _c	Without snubber T _j = 125°C		MIN.	13	22	A/ms

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■ STANDARD (4 Quadrants)

Symbol	Test Conditions	Quadrant		Value	Unit
I_{GT}	$V_D = 12\text{ V}$ $R_L = 33\ \Omega$	I - II - III IV	MAX.	50 100	mA
V_{GT}		ALL	MAX.	1.3	V
V_{GD}	$V_D = V_{DRM}$ $R_L = 3.3\ \Omega$ $T_j = 125^\circ\text{C}$	ALL	MIN.	0.2	V
I_H	$I_T = 500\text{ mA}$		MAX.	80	mA
I_L	$I_G = 1.2 I_{GT}$	I - III - IV	MAX.	70	mA
		II		160	
dV/dt	$V_D = 67\% V_{DRM}$ gate open $T_j = 125^\circ\text{C}$		MIN.	500	V/ μs
(dV/dt)c	(dI/dt)c = 13.3 A/ms $T_j = 125^\circ\text{C}$		MIN.	10	V/ μs

STATIC CHARACTERISTICS

Symbol	Test Conditions		Value	Unit	
V_{TM}	$I_{TM} = 25\text{ A}$ $t_p = 380\ \mu\text{s}$	$T_j = 25^\circ\text{C}$	MAX.	1.55	V
V_{to}	Threshold voltage	$T_j = 125^\circ\text{C}$	MAX.	0.85	V
R_d	Dynamic resistance	$T_j = 125^\circ\text{C}$	MAX.	16	m Ω
I_{DRM}	$V_{DRM} = V_{RRM}$	$T_j = 25^\circ\text{C}$	MAX.	5	μA
I_{RRM}		$T_j = 125^\circ\text{C}$		3	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	Junction to case (AC)	0.8	$^\circ\text{C/W}$
$R_{th(j-a)}$	Junction to ambient	60	$^\circ\text{C/W}$

PRODUCT SELECTOR

Part Number	Voltage (xxx)		Sensitivity	Type	Package
	200 V	~ 1800 V			
BTA26	X	X	50 mA	Standard	TO-218

OTHER INFORMATION

Part Number	Marking	Weight	Base quantity	Packing mode
BTA26	BTA26	4.6g	250	Bulk

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Fig. 1 Maximum power dissipation versus RMS on-state current (full cycle).

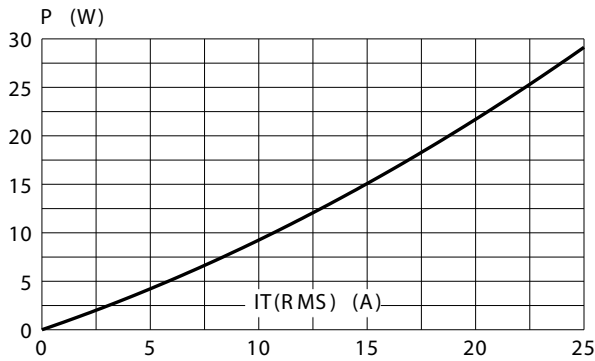


Fig. 2 : RMS on-state current versus case temperature (full cycle).

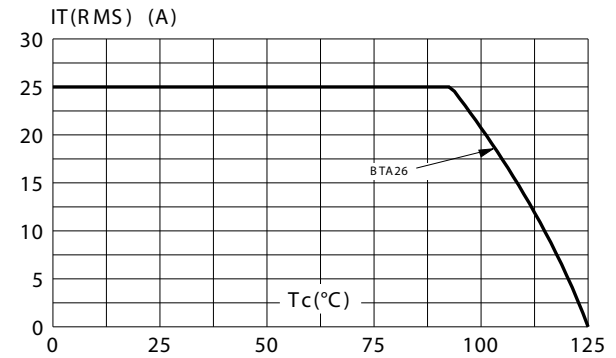


Fig.3: Relative variation of thermal impedance versus pulse duration.

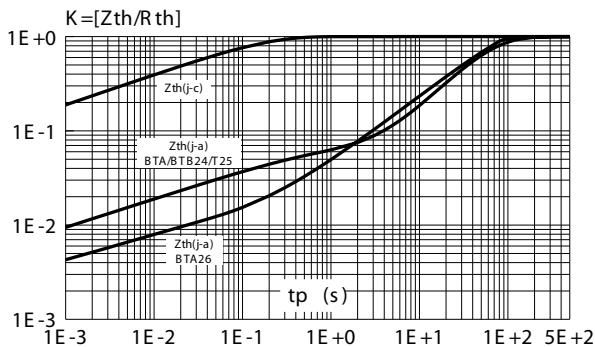


Fig. 4 : On-state characteristics (maximum values).

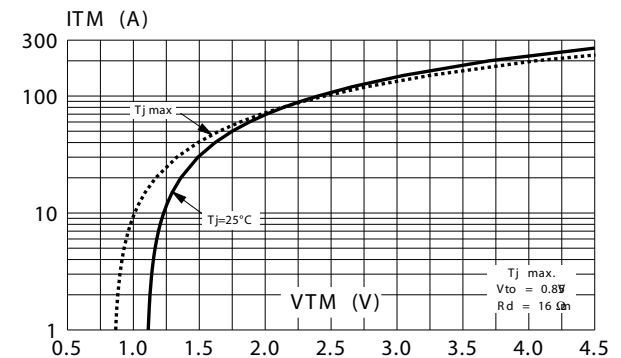


Fig. 5 Surge peak on-state current versus number of cycles.

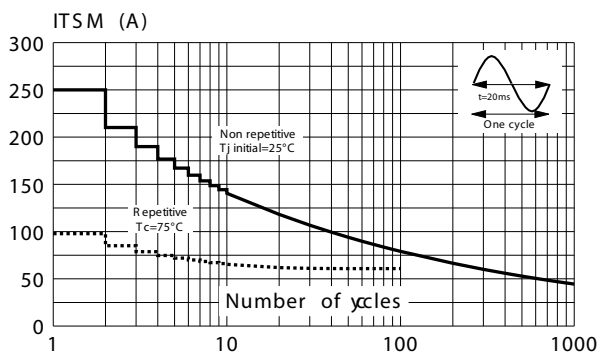
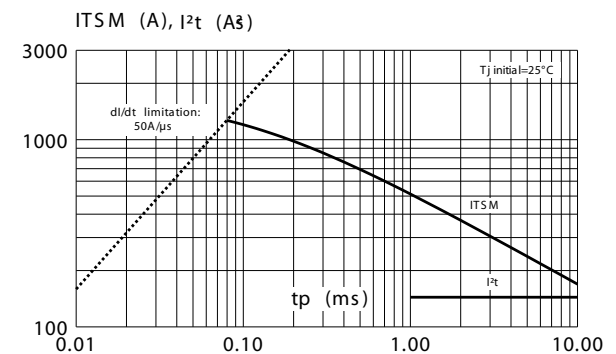


Fig. 6 Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 10\text{ms}$, and corresponding value of I^2t .



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Fig. 7: Relative variation of gate trigger current, holding current and latching current versus junction temperature (typical values).

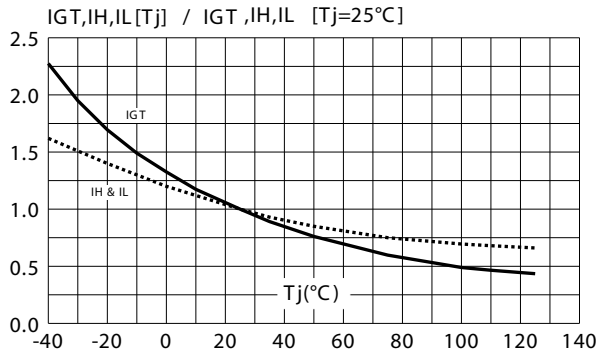


Fig.8: Relative variation of critical rate of decrease of main current versus (dV/dt)c (typical values).

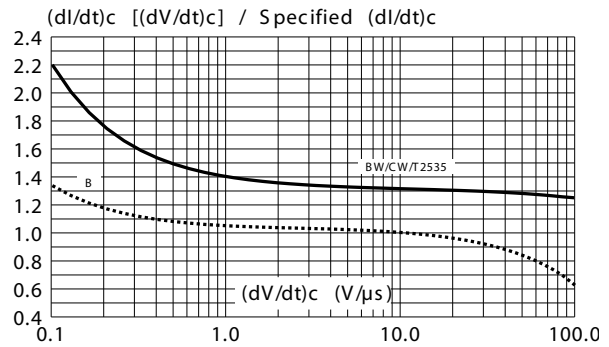


Fig.9: Relative variation of critical rate of decrease of main current versus junction temperature.

