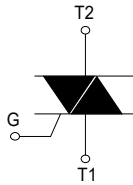
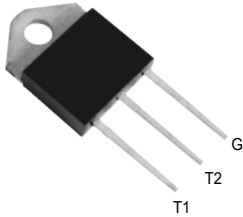
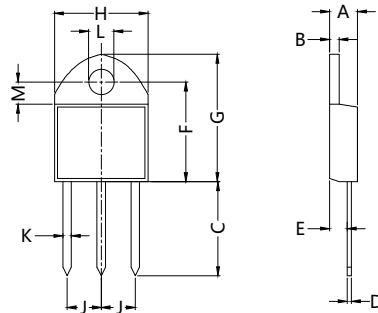


BTA26

Discrete Triacs(Isolated)



Dimensions TO-218



Dim.	Millimeter	
	Min.	Max.
A	4.40	4.70
B	1.45	1.65
C	14.50	16.10
D	0.45	0.80
E	2.60	2.95
F	15.80	17.00
G	20.10	21.20
H	15.00	15.80
J	5.30	5.75
K	1.25	1.55
ØL	4.00	4.25
M	3.45	3.75

Type	VRSM	VRRM
	VDSM	VDRM
	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

UL 310749

Symbol	Parameter			Value	Unit
$I_{T(RMS)}$	RMS on-state current (full sine wave)	TO-218	$T_c = 100^{\circ}C$	25	A
I_{TSM}	Non repetitive surge peak on-state current (full cycle, T_j initial $= 25^{\circ}C$)	F=60Hz	t=16.7ms	250	A
		F=50Hz	t=20ms	260	
I^2t	I^2t Value for fusing	tp=10 ms		340	A^2s
dI/dt	Critical rate of rise of on-state current $I_G = 2 \times I_{GT}$, $tr \leq 100$ ns	F=120 Hz	$T_j = 125^{\circ}C$	50	A/ μs
V_{DSM}/V_{RSM}	Non repetitive surge peak off-state voltage	tp=10ms	$T_j = 25^{\circ}C$	$V_{DRM}/V_{RRM} + 100$	V
I_{GM}	Peak gate current	tp=20 μs	$T_j = 125^{\circ}C$	4	A
$P_{G(AV)}$	Average gate power dissipation		$T_j = 125^{\circ}C$	1	W
T_{stg} T_j	Storage junction temperature range Operating junction temperature range				- 40 to + 150 - 40 to + 125 $^{\circ}C$

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

■ SNUBBERLESS and LOGIC LEVEL(3 Quadrants)

Symbol	Test Conditions	Quadrant		BTA26		Unit
				CW	BW	
I_{GT}	$V_D = 12$ V $R_L = 33 \Omega$	I - II - III	MAX.	35	50	mA
V_{GT}		I - II - III	MAX.	1.3		V
V_{GD}	$V_D = V_{DRM}$ $R_L = 3.3$ k Ω $T_j = 125^{\circ}C$	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 $T_j = 125^{\circ}C$		MIN.	500	1000	V/ μs
(dI/dt) _c	Without snubber $T_j = 125^{\circ}C$		MIN.	13	22	A/ms

Viso>2500VAC 1min

Sirectifier®

BTA26

Discrete Triacs(Isolated)

■ 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 ~ 1200 V				
BTA26	X	X	50 mA	Standard	TO-218

OTHER INFORMATION

Part Number	Marking	Weight	Base quantity	Packing mode
BTA26	BTA26	4.6g	30	Tube

Sirectifier®

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Discrete Triacs(Isolated)

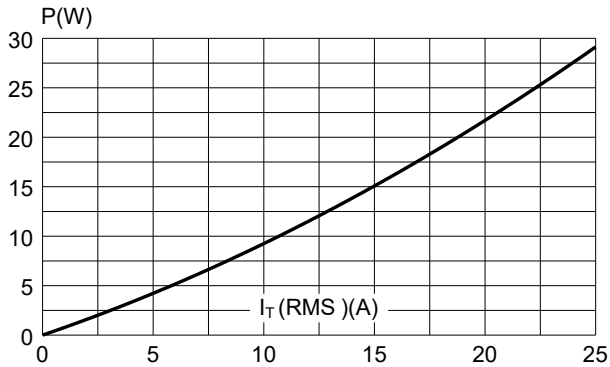


Fig.1:Maximum power dissipation versus RMS on-state current (full cycle).

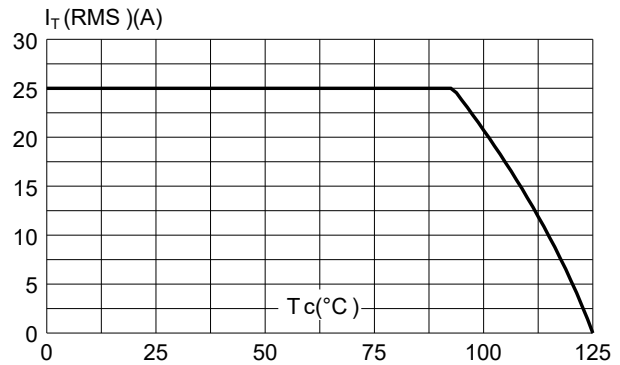


Fig.2:RMS on-state current versus case temperature (full cycle).

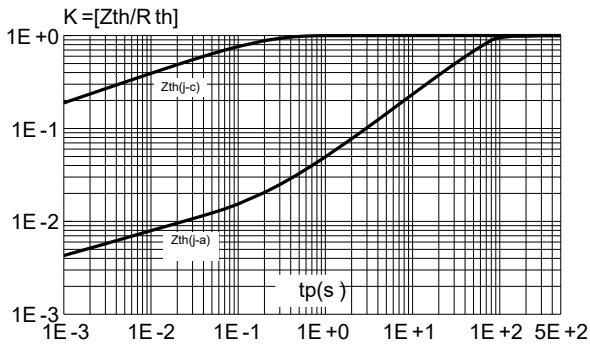


Fig.3:Relative variation of thermal impedance versus pulse duration.

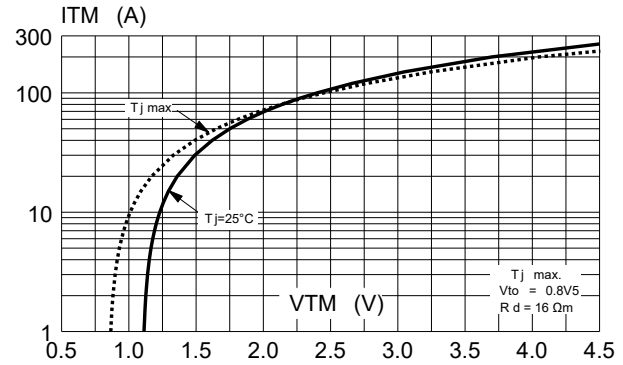


Fig.4:On-state characteristics (maximum values).

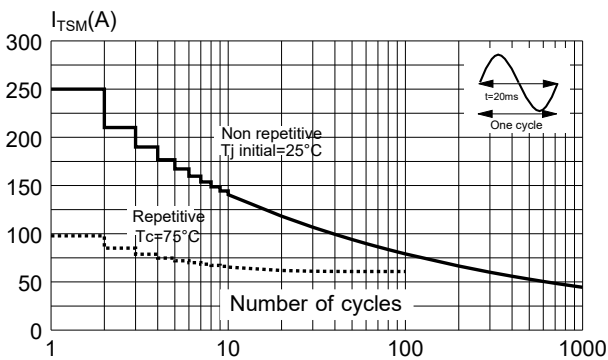


Fig.5:Surgepeak on-state current versus number of cycles.

for a sinusoidal pulse with width $tp<10ms$, and corresponding value of I^2t .

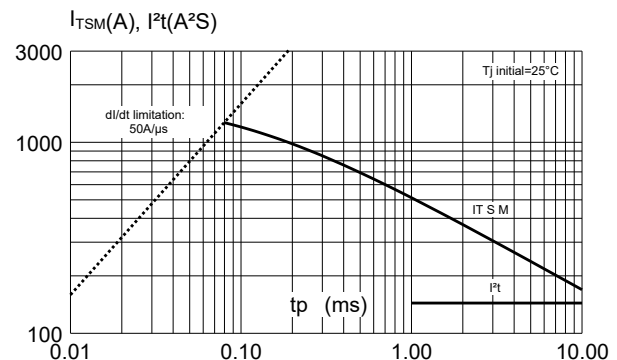


Fig.6:Non-repetitive surge peak on-state current

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Discrete Triacs(Isolated)

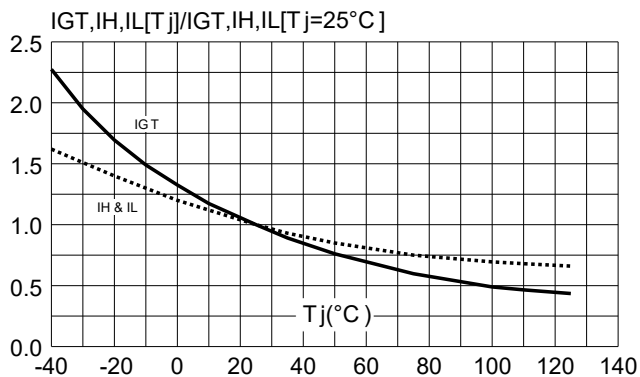


Fig.7:Relative variation of gate trigger current, holding current and latching current versus junction temperature (typical values).

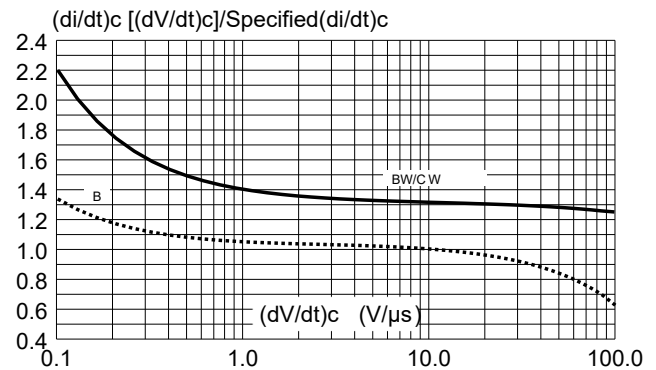


Fig.8:Relative variation of critical rate of decrease of main current versus(dV/dt)c (typical values).

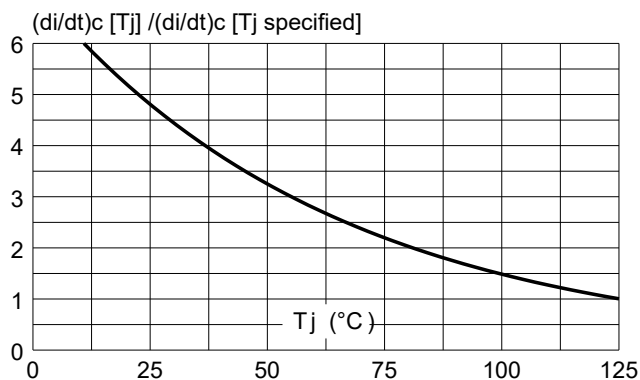


Fig.9:Relative variation of critical rate of decrease of main current versus junction temperature.