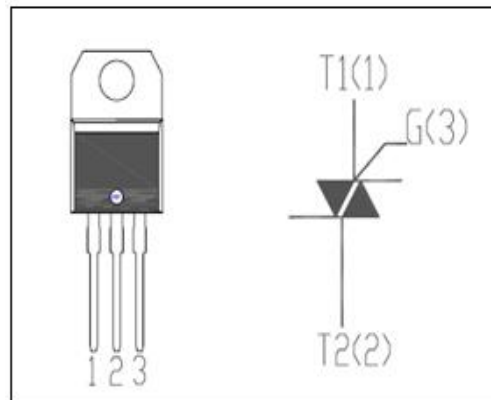


isc Thyristors
BTA416Y-600C
DESCRIPTION

- With TO-220 packaging
- Can be operated in 3 quadrants
- Very high commutation performance
- Isolated mounting base
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


APPLICATIONS

- Switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	MAX	UNIT
V _{DRM}	Repetitive peak off-state voltage	600	V
V _{RRM}	Repetitive peak reverse voltage	600	V
I _{T(AV)}	Average on-state current	16	A
I _{TSM}	Surge non-repetitive on-state current	160 176	A
		50HZ 60HZ	
P _{G(AV)}	Average gate power dissipation (over any 20 ms period)	0.5	W
T _j	Operating junction temperature	-40~150	°C
T _{stg}	Storage temperature	-40~150	°C

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

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_R=V_{RRM}$ Rated; $V_D=V_{DRM}$ Rated;	$T_j=125^\circ\text{C}$ $T_j=150^\circ\text{C}$		0.5 2	mA
I_{DRM}	Repetitive peak off-state current					
V_{TM}	On-state voltage	$I_T=20\text{A}; t_p=380 \mu\text{s}$			1.5	V
I_{GT}	Gate-trigger current	$V_D=12\text{V}; I_T=0.1\text{A};$	I		35	mA
			II		35	
			III		35	
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; I_T=0.1\text{A};$			1.5	V
$R_{th}(j-c)$	Junction to case				1.6	$^\circ\text{C}/\text{W}$

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