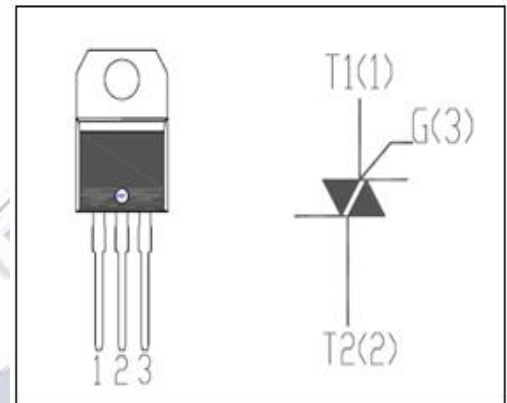


isc Thyristors
BTA412Y-600ET
DESCRIPTION

- With TO-220 packaging
- High operating junction temperature
- Very high commutation performance maximized at each gate sensitivity
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High temperature, high power motor control
- Solid state relays; heating and cooking appliances
- Switching applications


ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	MIN	UNIT
V _{DRM}	Repetitive peak off-state voltage	600	V
V _{RRM}	Repetitive peak reverse voltage	600	V
I _{T(RMS)}	RMS on-state current @T _c =118°C	12	A
I _{TSM}	Surge non-repetitive on-state current	140 150	A
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°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I _{RRM}	Repetitive peak reverse current	V _R =V _{RRM} Rated; T _j =25°C V _D =V _{DRM} Rated; T _j =125°C		0.01	mA
I _{DRM}	Repetitive peak off-state current		2		
V _{TM}	On-state voltage	I _T =17A, t _p =380 μs		1.6	V
I _{GT}	Gate-trigger current	V _D = 12V; I _T =0.1A	I	10	mA
			II	10	
			III	10	
V _{GT}	Gate-trigger voltage	V _D = 12V; I _T =0.1A		1	V