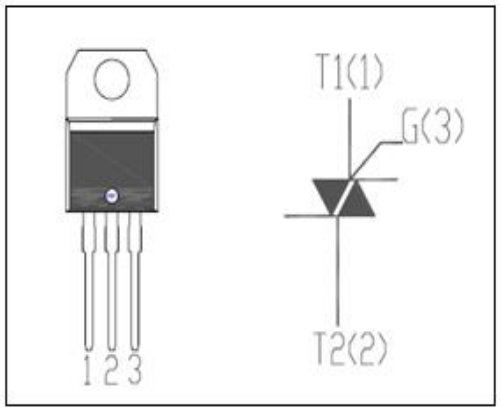
isc Thyristors — BTA412Y-600ET

DESCRIPTION

- With TO-220 packaging
- High operating junction temperature
- Very high commutation performancemaximized 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℃)

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 @Tc=118℃		12	A
I_{TSM}	Surge non-repetitive on-state current	50HZ 60HZ	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	℃
T_{stg}	Storage temperature		-40~150	℃

ELECTRICAL CHARACTERISTICS (T_C=25℃ 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;	Tj=25℃ Tj=125℃		0.01 2	mA
I_{DRM}	Repetitive peak off-state current					
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 II III		10 10 10	mA
V_{GT}	Gate-trigger voltage	V_D =12V;I_T=0.1A			1	V