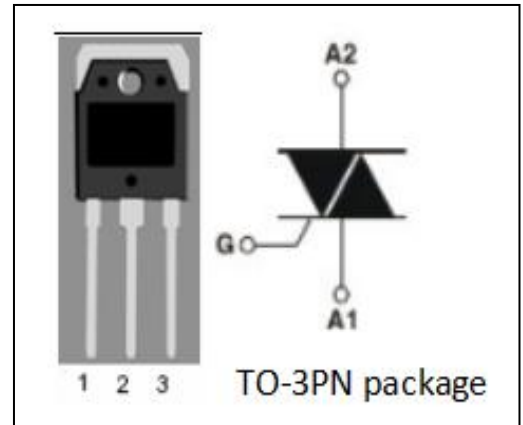


**isc Thyristors**
**BTA445Z-800BT**
**DESCRIPTION**

- With TO-3PN packaging
- Operating in 4 quadrants
- High commutation capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching applications
- Phase control
- Static switching on inductive or resistive load


**ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}\text{C}$ )**

SYMBOL	PARAMETER		MAX	UNIT
$V_{\text{DRM}}$	Repetitive peak off-state voltage		800	V
$V_{\text{RRM}}$	Repetitive peak reverse voltage		800	V
$I_{\text{T(RSM)}}$	Average on-state current	$T_c=105^{\circ}\text{C}$	45	A
$I_{\text{TSM}}$	Surge non-repetitive on-state current	50HZ 60HZ	450 495	A
$P_{\text{G(AV)}}$	Average gate power dissipation ( over any 20 ms period ) $T_j=125^{\circ}\text{C}$		1	W
$T_j$	Operating junction temperature		-40~125	$^{\circ}\text{C}$
$T_{\text{stg}}$	Storage temperature		-40~150	$^{\circ}\text{C}$

**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;	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$		10 2	$\mu\text{A}$ mA
$I_{DRM}$	Repetitive peak off-state current					
$V_{TM}$	On-state voltage	$I_T=63.6\text{A}$			1.7	V
$I_{GT}$	Gate-trigger current	$V_D=12\text{V}; I_T=0.1\text{A}$	I		50	mA
			II		50	
			III		50	
			IV		70	
$V_{GT}$	Gate-trigger voltage	$V_D=12\text{V}; I_T=0.1\text{A}$			1.3	V
$R_{th(j-c)}$	Junction to case				0.9	$^\circ\text{C/W}$

**NOTICE:**

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