

isc Thyristors

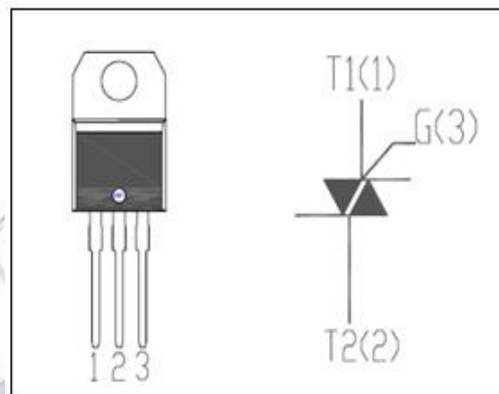
T1635T-8I

DESCRIPTION

- With TO-220 packaging
- Operating in 3 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_{DRM}	Repetitive peak off-state voltage @ $T_c=125^{\circ}\text{C}$	800	V
V_{RRM}	Repetitive peak reverse voltage @ $T_c=125^{\circ}\text{C}$	800	V
$I_{\text{T(RSM)}}$	Average on-state current @ $T_c=108^{\circ}\text{C}$ @ $T_c=119^{\circ}\text{C}$	16 12	A
I_{TSM}	Surge non-repetitive on-state current 50Hz 60Hz	120 126	A
$P_{\text{G(AV)}}$	Average gate power dissipation (over any 20 ms period)	1	W
T_j	Operating junction temperature	-40~150	$^{\circ}\text{C}$
T_{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	$V_R=V_{\text{RRM}}$ Rated; $T_j=25^{\circ}\text{C}$		5	μA
I_{DRM}	Repetitive peak off-state current	$V_D=V_{\text{DRM}}$ Rated; $T_j=125^{\circ}\text{C}$		1	mA
V_{TM}	On-state voltage	$I_T=22.6\text{A}$		1.55	V
I_{GT}	Gate-trigger current	$V_D=12\text{V}; R_L=30\Omega$	I II III	35 35 35	mA
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; R_L=30\Omega$		1.3	V
$R_{\text{th (j-c)}}$	Junction to case	For DC		2.1	$^{\circ}\text{C/W}$