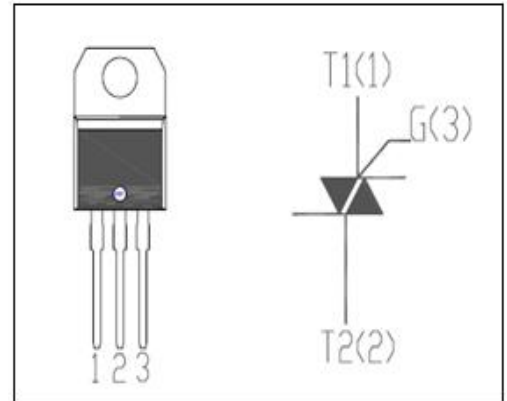


isc Thyristors
TXDV812
DESCRIPTION

- 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 ($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	800	V
V_{RRM}	Repetitive peak reverse voltage	800	V
$I_{\text{T(RMS)}}$	RMS on-state current @ $T_c=90^{\circ}\text{C}$	12	A
I_{TSM}	Surge non-repetitive on-state current	120 125	A
$P_{\text{G(AV)}}$	Average gate power dissipation (over any 20 ms period)	0.5	W
T_j	Operating junction temperature	-40~125	$^{\circ}\text{C}$
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; $V_D=V_{\text{DRM}}$ Rated; $T_j=25^{\circ}\text{C}$ $T_j=125^{\circ}\text{C}$		0.01	mA
I_{DRM}	Repetitive peak off-state current		2		
V_{TM}	On-state voltage	$I_T=17\text{A}, t_p=380\ \mu\text{s}$		1.95	V
I_{GT}	Gate-trigger current	$V_D=12\text{V}; R_L=33\ \Omega$	I	100	mA
			II	100	
			III	100	
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; R_L=33\ \Omega$		1.5	V

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