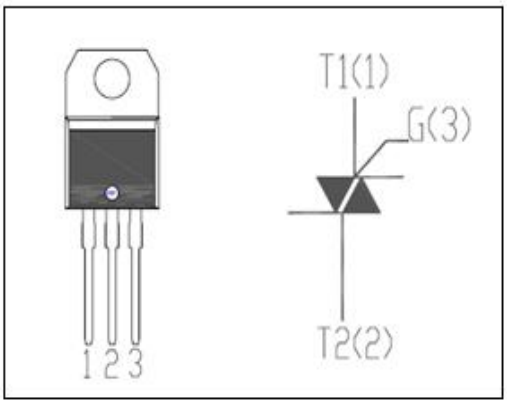
isc Thyristors Q6025R5

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

- Solid state relays;heating and cooking appliances
- Switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		MAX	UNIT
V_{DRM}	Repetitive peak off-state voltage		600	V
V_{RRM}	Repetitive peak reverse voltage		600	V
$I_{T(RSM)}$	Average on-state current @Tc=110℃		25	A
I_{TSM}	Surge non-repetitive on-state current	50HZ 60HZ	167 200	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=100℃ Tj=125℃		0.1 1.0 3.0	mA
I_{DRM}	Repetitive peak off-state current					
V_{TM}	On-state voltage	I_T=25A			1.8	V
I_{GT}	Gate-trigger current	V_D =12V;RG=330Ω; RL=6Ω	I II III		50 50 50	mA
V_{GT}	Gate-trigger voltage	V_D =12V;RG=330Ω;RL=6Ω			2.5	V
Rth $_{(j-c)}$	Junction to case	Half cycle			0.89	℃/W

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