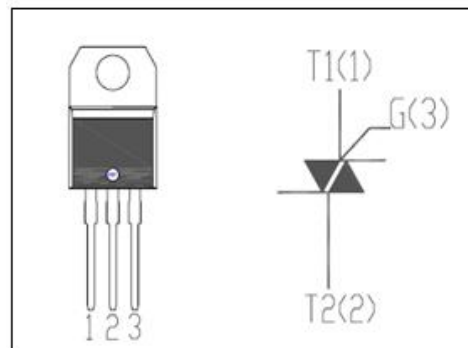


isc Triacs

Q6012LH5

FEATURES

- With TO-220AB insulated package
- Suitable for general purpose AC switching. Which can be used as an ON/OFF function in applications such as static relays, heating regulation, induction motor starting circuits. Or for phase control operation in light dimmers, motor speed controllers etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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

SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	600	V
V_{RRM}	Repetitive peak off-state voltage	600	V
$I_{\text{T(RMS)}}$	RMS on-state current (full sine wave)	12	A
I_{TSM}	Non-repetitive peak on-state current	120	A
T_j	Operating junction temperature	-40~125	$^\circ\text{C}$
T_{stg}	Storage temperature	-40~125	$^\circ\text{C}$
$R_{\text{th(j-c)}}$	Thermal resistance, junction to case	2.1	$^\circ\text{C/W}$
$R_{\text{th(j-a)}}$	Thermal resistance, junction to ambient	60	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER		CONDITIONS	MAX	UNIT
I_{RRM}	Repetitive peak reverse current		$V_R=V_{\text{RRM}}$, $V_R=V_{\text{RRM}}$, $T_j=125^\circ\text{C}$	0.01 2	mA
I_{DRM}	Repetitive peak off-state current		$V_D=V_{\text{DRM}}$, $V_D=V_{\text{DRM}}$, $T_j=125^\circ\text{C}$	0.01 2	mA
I_{GT}	Gate trigger current	I	$V_D=12\text{V}$; $R_L=33\ \Omega$	50	mA
		II		50	
		III		50	
I_{H}	Holding current		$I_{\text{GT}}=0.1\text{A}$, Gate Open	50	mA
V_{GT}	Gate trigger voltage all quadrant		$V_D=12\text{V}$; $R_L=33\ \Omega$	1.3	V
V_{TM}	On-state voltage		$I_T=20\text{A}$; $t_p=380\ \mu\text{s}$	1.6	V

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