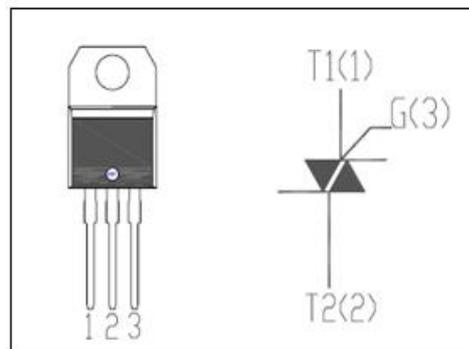


isc Triacs

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(Ta=25°C)

SYMBOL	PARAMETER	MIN	UNIT
V _{DRM}	Repetitive peak off-state voltage	600	V
V _{RRM}	Repetitive peak off-state voltage	600	V
I _{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	°C
T _{stg}	Storage temperature	-40~125	°C
R _{th(j-c)}	Thermal resistance, junction to case	2.1	°C/W
R _{th(j-a)}	Thermal resistance, junction to ambient	60	°C/W

ELECTRICAL CHARACTERISTICS (T_c=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
I _{RRM}	Repetitive peak reverse current	V _R =V _{RRM} , V _R =V _{RRM} , T _j =125°C	0.01 2	mA
I _{DRM}	Repetitive peak off-state current	V _D =V _{DRM} , V _D =V _{DRM} , T _j =125°C	0.01 2	mA
I _{GT}	Gate trigger current	I	50	mA
		II		
		III		
		V _D =12V; R _L = 33 Ω	50	
I _H	Holding current	I _{GT} = 0.1A, Gate Open	50	mA
V _{GT}	Gate trigger voltage all quadrant	V _D =12V; R _L = 33 Ω	1.3	V
V _{TM}	On-state voltage	I _T = 20A; t _p = 380 μs	1.6	V

**NOTICE:**

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.