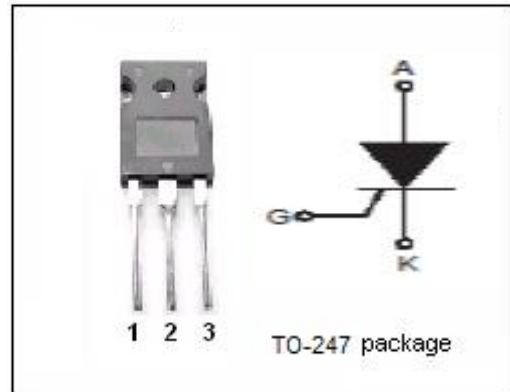


isc Thyristors
70TPS12
DESCRIPTION

- With TO-3PN packaging
- 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($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	MAX	UNIT
V_{DRM}	Repetitive peak off-state voltage	1200	V
V_{RRM}	Repetitive peak reverse voltage	1200	V
$I_{\text{T(AV)}}$	Average on-state current	70	A
		@ $T_c=82^{\circ}\text{C}$	
I_{TSM}	Surge non-repetitive on-state current	1200	A
		60HZ	
$P_{\text{G(AV)}}$	Average gate power dissipation (over any 20 ms period)	2.5	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	$V_R=V_{RRM}$ Rated; $V_D=V_{DRM}$ Rated;	$T_j=25^\circ\text{C}$ $T_j=125^\circ\text{C}$		1.0 15	mA
I_{DRM}	Repetitive peak off-state current					
V_{TM}	On-state voltage	$I_T=100\text{A}$			1.5	V
I_{GT}	Gate-trigger current	$V_D=6\text{V}$			100	mA
V_{GT}	Gate-trigger voltage	$V_D=6\text{V}$			1.5	V
$R_{th(j-c)}$	Junction to case				0.27	$^\circ\text{C/W}$

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.