

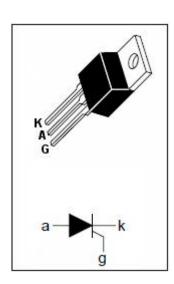
isc Thyristors TIC126D

APPLICATIONS

- 12A contimunous on-state current
- 100A surge-current
- · Glass passivated
- Max I_{GT} of 20mA
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	MIN	UNIT	
V_{DRM}	Repetitive peak off-state voltage	400	V	
V _{RRM}	Repetitive peak reverse voltage	400	V	
I _{T(AV)}	On-state current Tc=80°C	7.5	Α	
I _{T(RMS)}	RMS on-state current Tc=80℃	12	Α	
I _{TM}	Surge peak on-state current	100	Α	
P_{GM}	Peak gate power P _W ≤300 μ s	5	W	
P _{G(AV)}	Average gate power	1	W	
T _j	Operating Junction temperature 11		$^{\circ}\!\mathbb{C}$	
T _{stg}	Storage temperature	-40 ~+125	$^{\circ}\!\mathbb{C}$	
R _{th(j-c)}	Thermal resistance, junction to case	2.4	°C/W	
R _{th(j-a)}	Thermal resistance, junction to ambient	62.5	°C/W	



ELECTRICAL CHARACTERISTICS (Tc=25℃ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I _{RRM}	Repetitive peak reverse current	V _{RM} =V _{RRM} , Tj=110 ℃			2.0	mA
I _{DRM}	Repetitive peak off-state current	V _{RM} =V _{RRM} , Tj=110 ℃			2.0	mA
V_{TM}	On-state voltage	I _{TM} = 12A			1.4	V
I _{GT}	Gate-trigger current	V _{AA} =6V; R _L =100 Ω			20	mA
V_{GT}	Gate-trigger voltage	V _{AA} =6V; R _L =100 Ω			1.5	V
I _H	Holding current	V_{AA} =6V; R_{GK} =1k Ω , I_{T} =100mA			40	mA



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.

