

FEATURES

- Heat transfer through ceramic.
- Hard solder joints for high reliability
- Isolated base mounting

TYPICAL APPLICATIONS

- DC motor control
- AC motor soft starters
- Temperature control for oven
- Chemical processes and professional light dimming

TECHNICAL DATA



DEVICE TYPE	V _{RRM} (V)	V _{RSM} (V)
IRKT570/12, IRKH570/12	1200	1300
IRKT570/16, IRKH570/16	1600	1700
IRKT570/20, IRKH570/20	2000	2100
IRKT570/22, IRKH570/22	2200	2300

SYMBOL	CONDITIONS	VALUES
I _{TAV} I _{RMS}	Sin. 180; T _{case} =85 °C T _a =45°C	570 amp. 850 amp.
I _{TSM} I ² _t	T _{vj} =25°C; 10 ms T _{vj} =25°C	19000 amp. 1805000 A ² S
I _{RRM} / I _{DRM}	T _{vj} =25°C T _{vj} =125°C	25 mA 100 mA
V _T V ₀ R ₀	T _{vj} =25°C (I _T =750 Amp.); max T _{vj} =125°C T _{vj} =125°C	1.44 V 0.78 V 0.32 mΩ
I _{GT} V _{GT} I _H I _L	T _{vj} =25 °C T _{vj} =25 °C T _{vj} =25 °C Typical value T _{vj} =25 °C Typical value	200 mA 3.0 V 500 mA 2000 mA
R _{th(j-c)} R _{th(c-h)} T _{vj} T _{stg}	Cont. } Sin. 180 } per thyristor/per module Sin. 120 } Per thyristor/per module	0.069/0.034 °C/W 0.072/0.036 °C/W 0.077/0.038 °C/W 0.02/0. 01 °C/W -40...+ 135 °C -40...+ 125 °C
Mounting torque		5 Nm/Per bolt
Weight	Approx.	600 gm
V _(isol)	Ac 50 Hz rms 1 min	3000 volts
Package Outline		IR-4

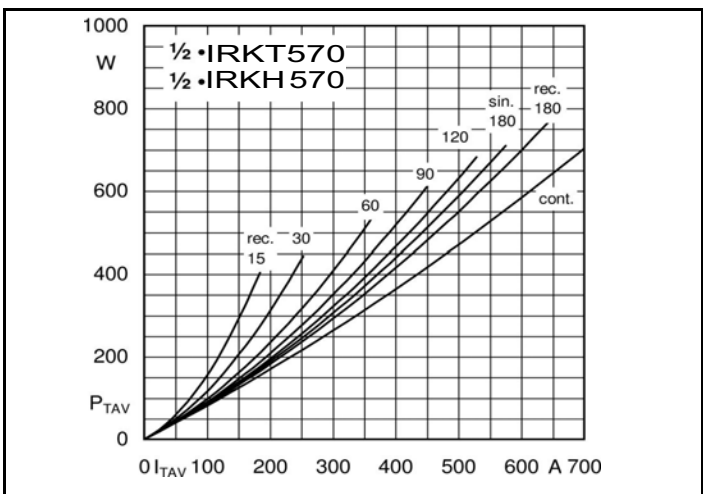


Fig. 1L Power dissipation vs. on-state current

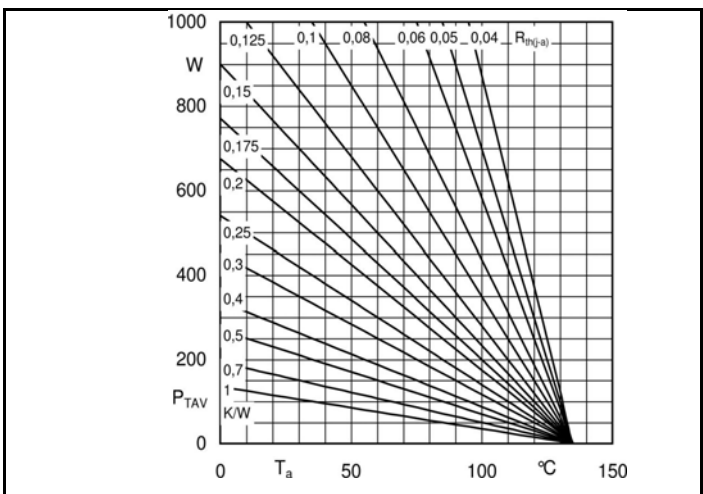


Fig. 1R Power dissipation vs. ambient temperature

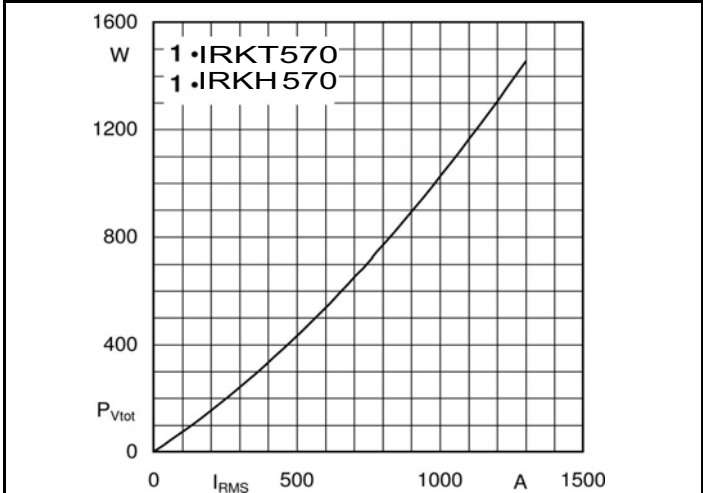


Fig. 2L Rated on-state current vs. case temperature

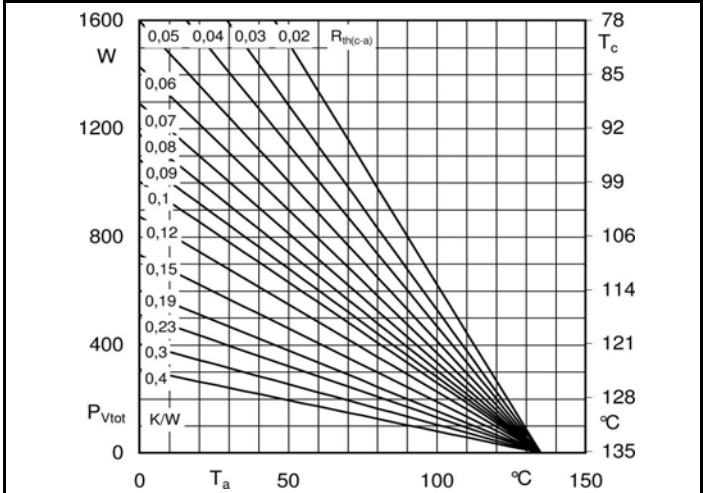


Fig. 2R Power dissipation per module vs. case temp.

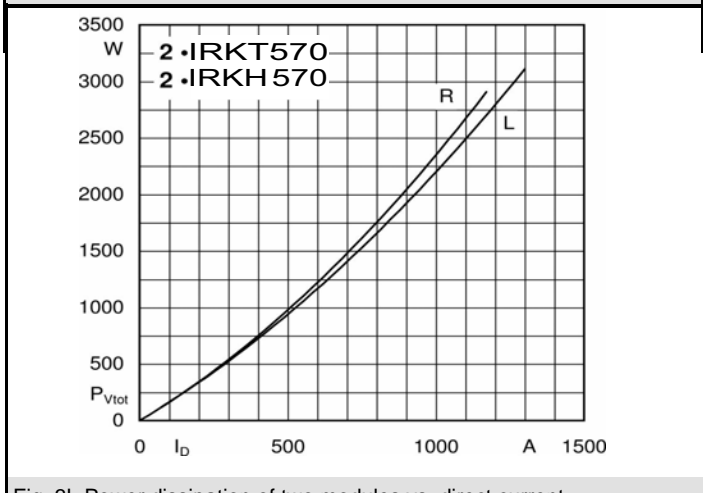


Fig. 3L Power dissipation of two modules vs. direct current

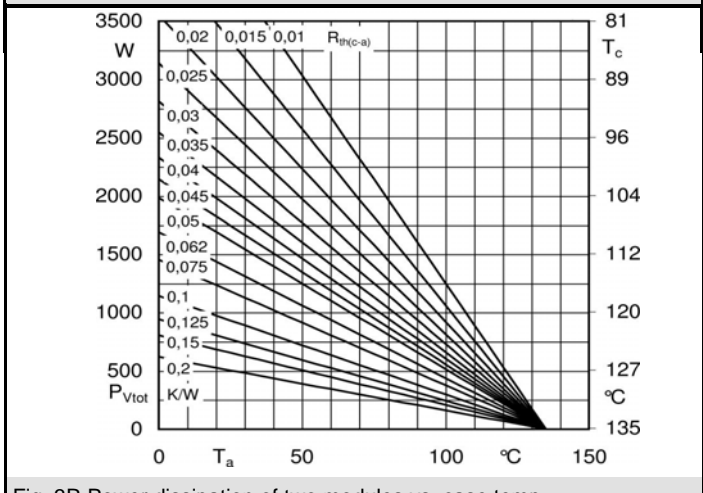


Fig. 3R Power dissipation of two modules vs. case temp.

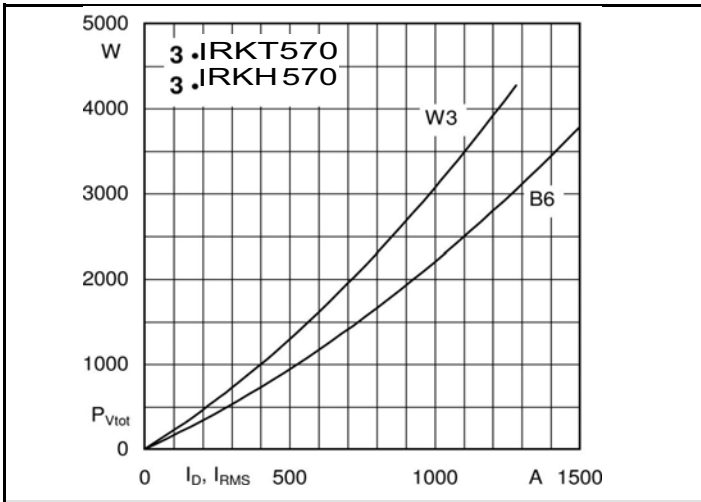


Fig. 4L Power dissipation of three modules vs. direct and rms current

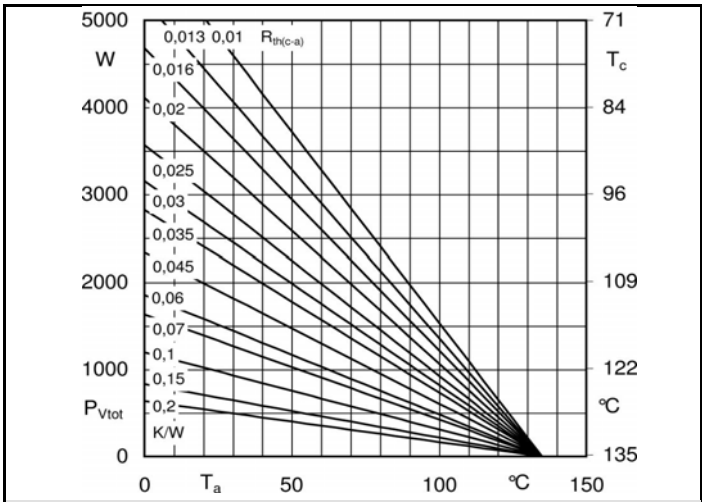


Fig. 4R Power dissipation of three modules vs. case temp.

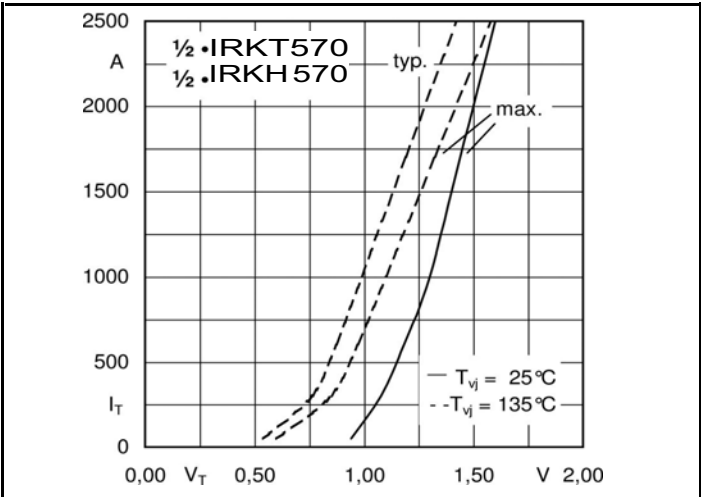


Fig. 7 On-state characteristics

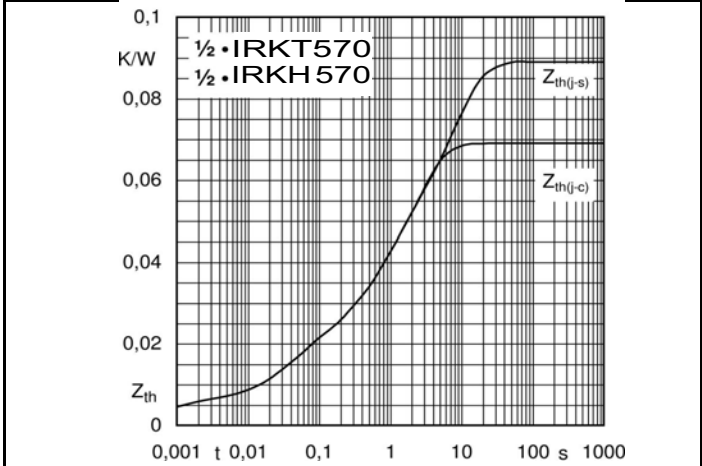


Fig. 6 Transient thermal impedance vs. time

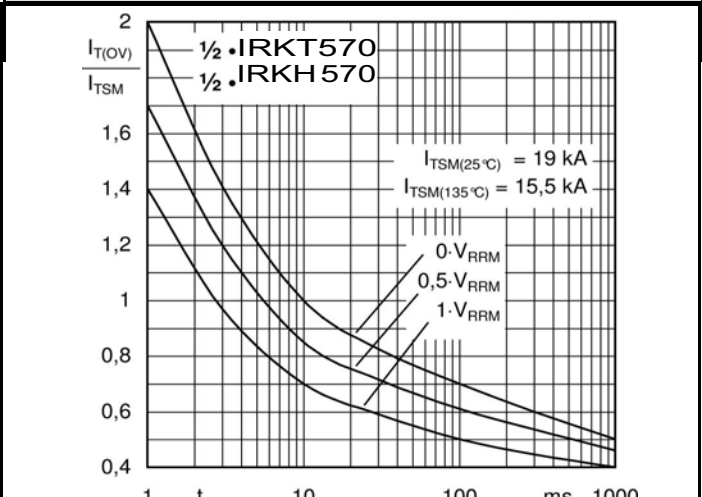
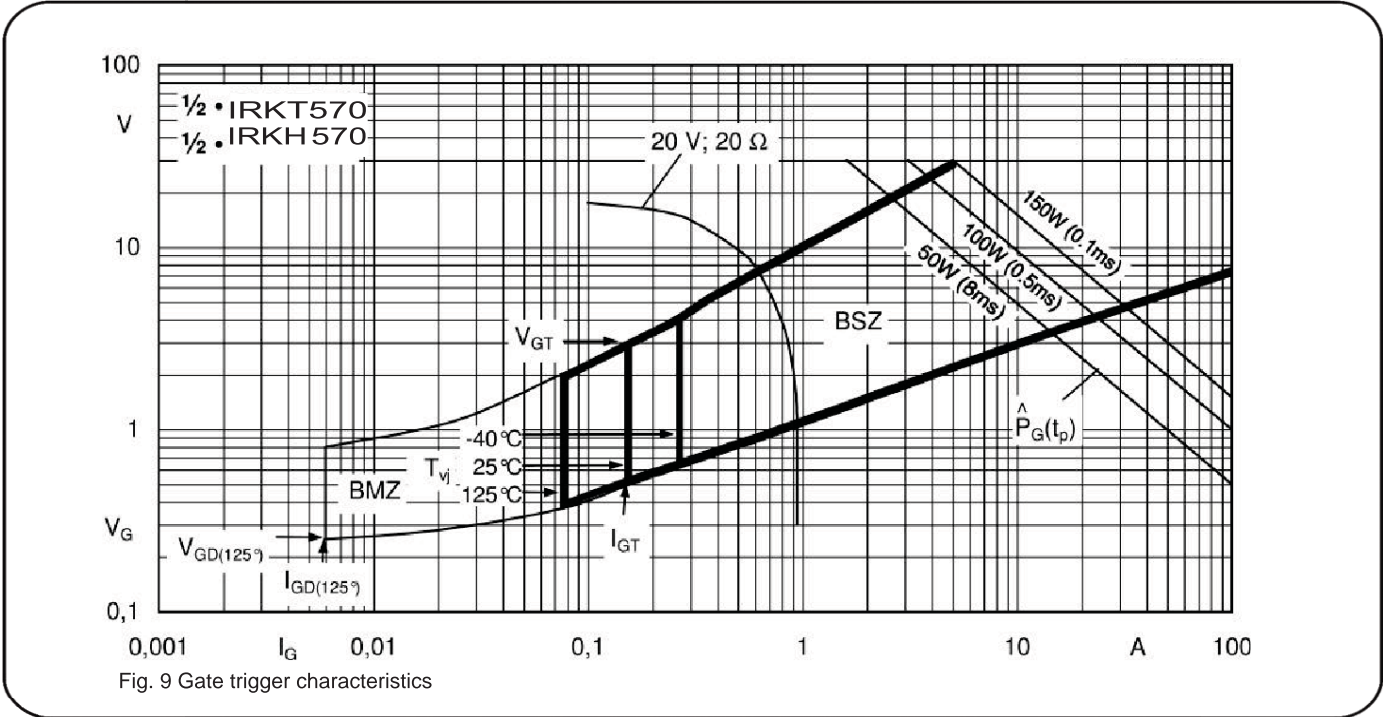


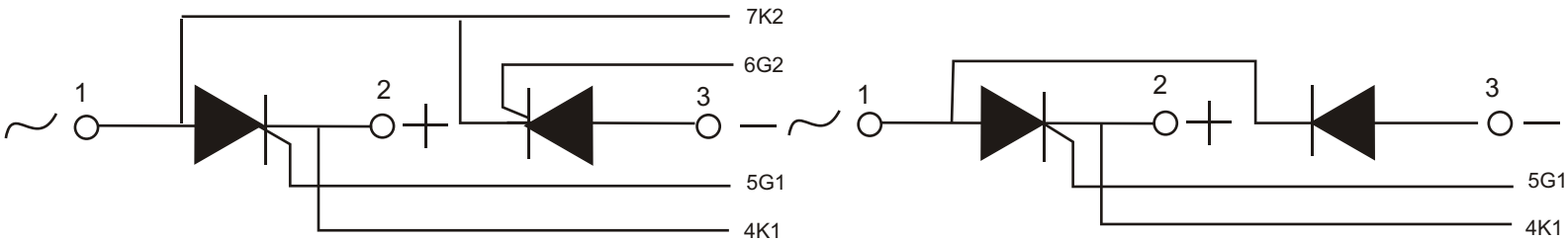
Fig. 8 Surge overload vs. time



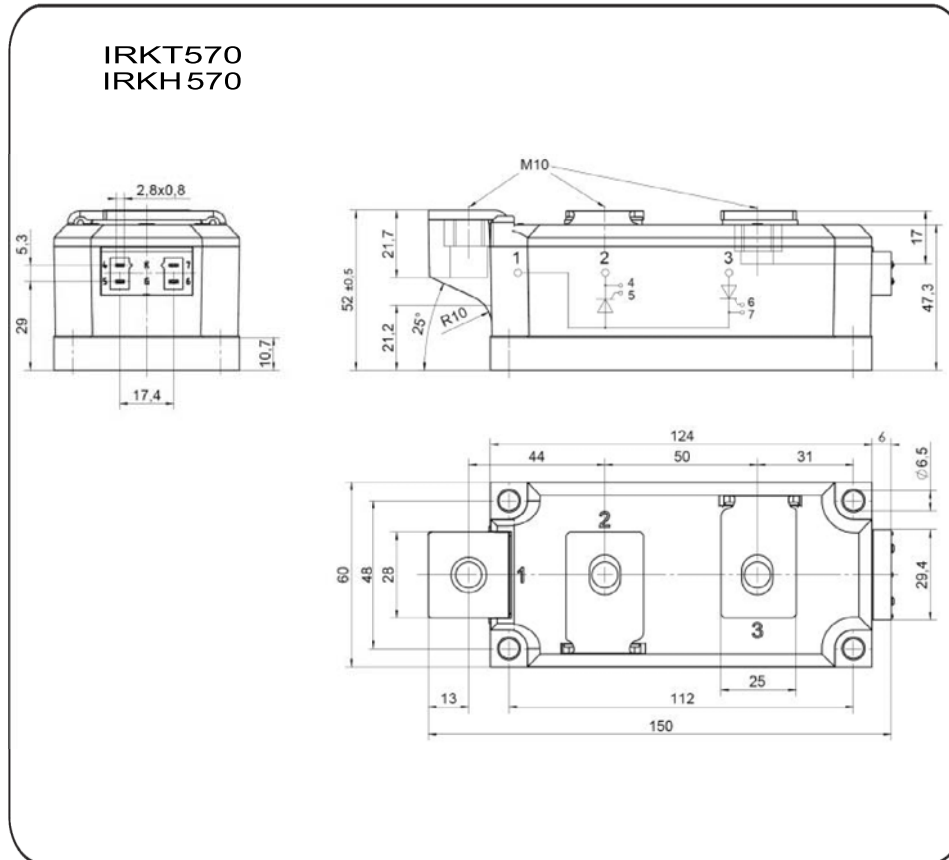
CIRCUIT DIAGRAM

IRKT570

IRKH 570



PACKAGE OUTLINE



All dimension are in mm .

Insel Rectifiers (India) Pvt. Ltd.

(An ISO 9001:2015, ISO 14001:2015 Certified Company)

Plot No 151, Udyog Kendra, Extn.-II, Ecotech-III, Greater Noida-201306

Toll Free No.: 1800 3070 9989, Fax : 011-27491404

E-mail : insel@rectifierindia.com, sales@rectifierindia.com