

## FEATURES

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

## TYPICAL APPLICATIONS

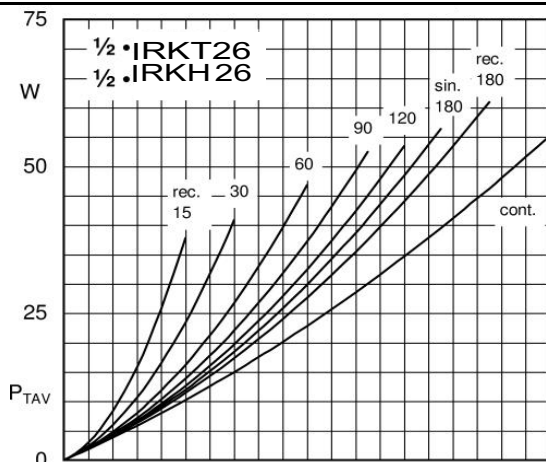
- DC motor control
- AC motor soft starters
- Temperature control for oven
- Chemical processes and professional light dimming

## TECHNICAL DATA

DEVICE TYPE	$V_{RRM}$ (V)	$V_{RSM}$ (V)
IRKT26/12, IRKH26/12	1200	1300
IRKT26/16, IRKH26/16	1600	1700
IRKT26/20, IRKH26/20	2000	2100
IRKT26/22, IRKH26/22	2200	2300



SYMBOL	CONDITIONS	VALUES
$I_{TAV}$ $I_{RMS}$	Sin. 180; $T_{case} = 85^{\circ}C$ $T_a = 45^{\circ}C$	25 amp. 52 amp.
$I_{TSM}$ $I_t^2$	$T_{vj} = 25^{\circ}C$ ; 10 ms $T_{vj} = 25^{\circ}C$	550 amp. 1500 A <sup>2</sup> S
$I_{RRM}/I_{DRM}$	$T_{vj} = 25^{\circ}C$ $T_{vj} = 125^{\circ}C$	2 mA 10 mA
$V_T$ $V_0$ $R_0$	$T_{vj} = 25^{\circ}C$ ( $I_T = 75$ Amp.); max $T_{vj} = 125^{\circ}C$ $T_{vj} = 125^{\circ}C$	1.80 V 0.9 V 12 mΩ
$I_{GT}$ $V_{GT}$ $I_H$ $I_L$	$T_{vj} = 25^{\circ}C$ $T_{vj} = 25^{\circ}C$ $T_{vj} = 25^{\circ}C$ Typical value $T_{vj} = 25^{\circ}C$ Typical value	150 mA 3.0 V 200 mA 400 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	0.9/0.45 $^{\circ}C/W$ 0.95/0.48 $^{\circ}C/W$ 1/0.5 $^{\circ}C/W$ 0.20/0.10 $^{\circ}C/W$ 125 $^{\circ}C$ (-) 40 to (+)125 $^{\circ}C$
Mounting torque		5 Nm/Per bolt
Weight	Approx.	95 gms
$V_{(isol)}$	Ac 50 Hz rms 1 min	3000 volts
Package Outline		IR-1



1L Power dissipation per thyristor vs. on-state current

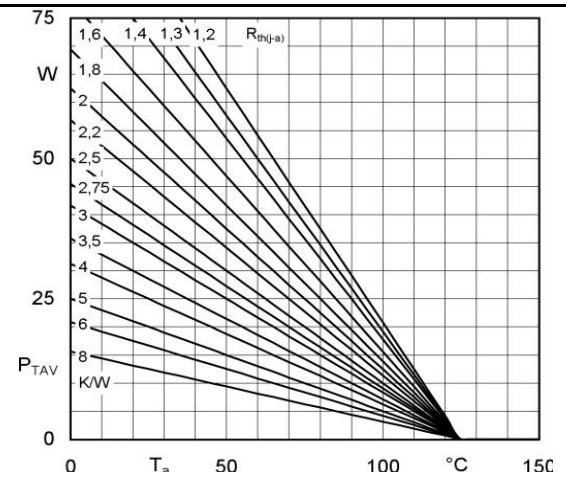
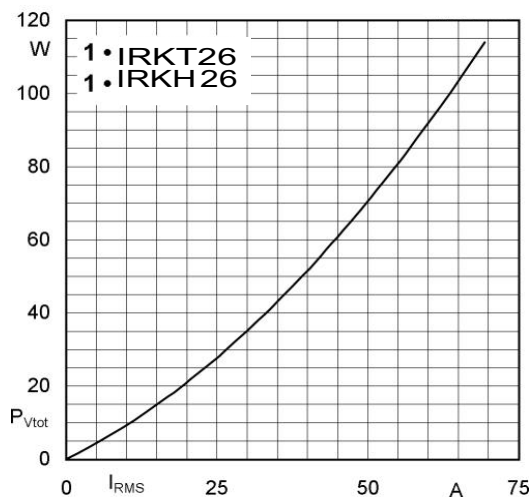


Fig. 1R Power dissipation per thyristor vs. ambient temp.



2L Power dissipation per module vs. rms current

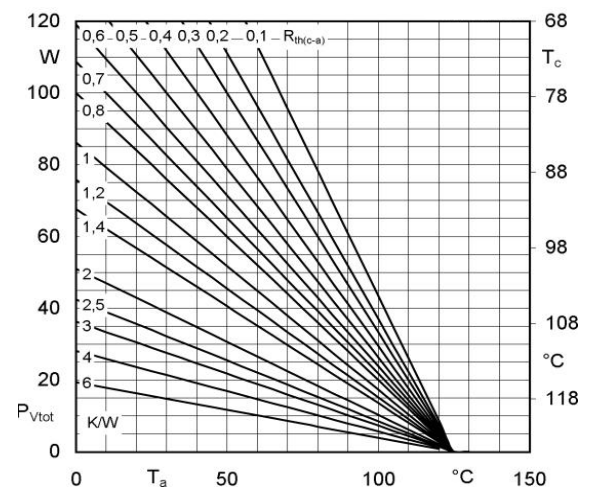


Fig. 2R Power dissipation per module vs. case temp.

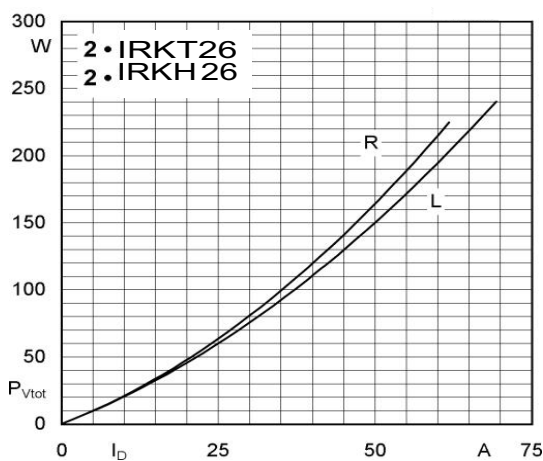


Fig. 3L Power dissipation of two modules vs. direct current

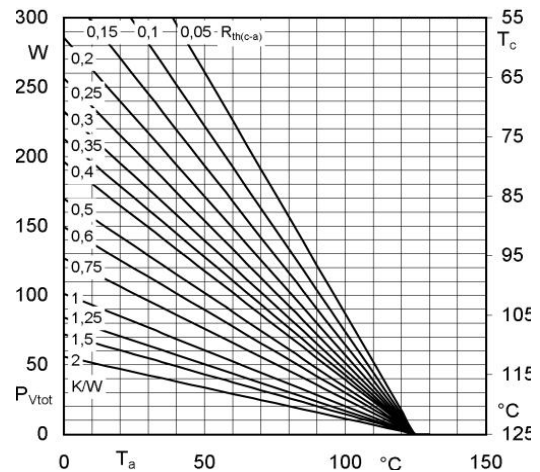


Fig. 3R Power dissipation of two modules vs. case temp.

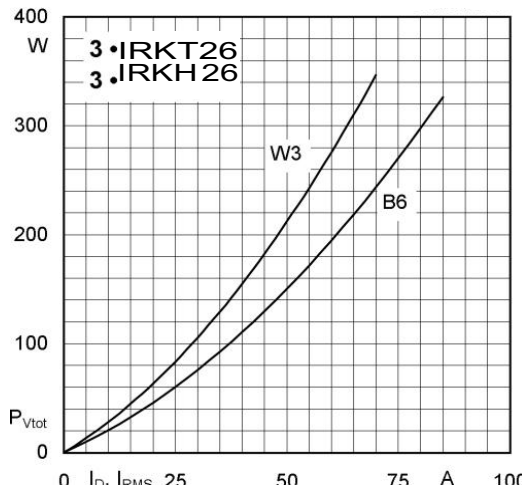


Fig. 4L Power dissipation of three modules vs. direct and rms current

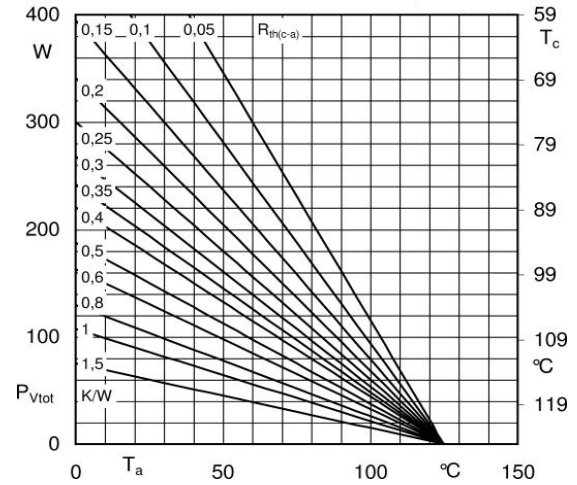


Fig. 4R Power dissipation of three modules vs. case temp.

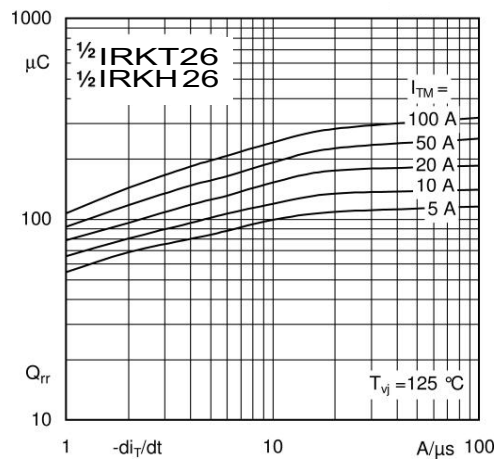


Fig. 5 Recovered charge vs. current decrease

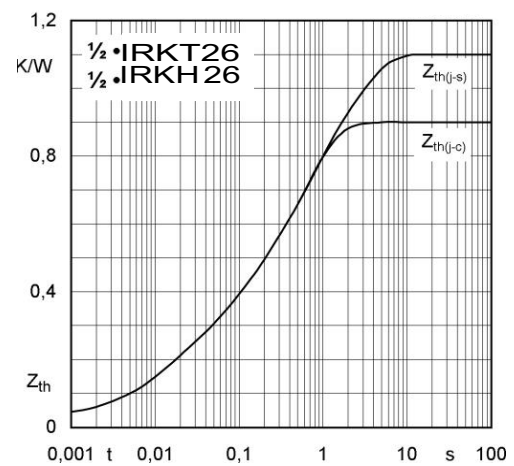


Fig. 6 Transient thermal impedance vs. time

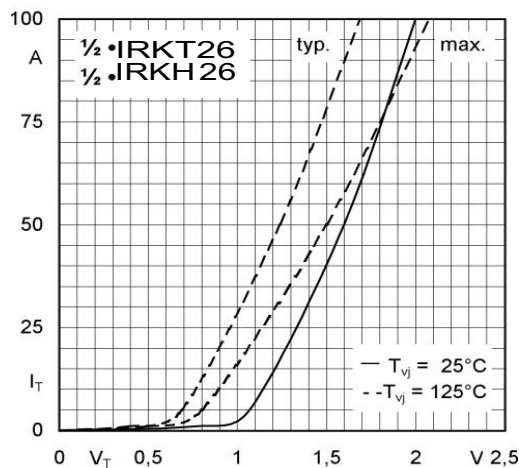


Fig. 7 On-state characteristics

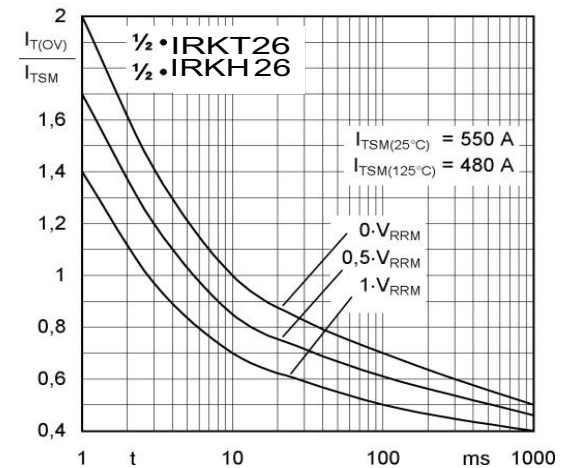


Fig. 8 Surge overload current vs. time

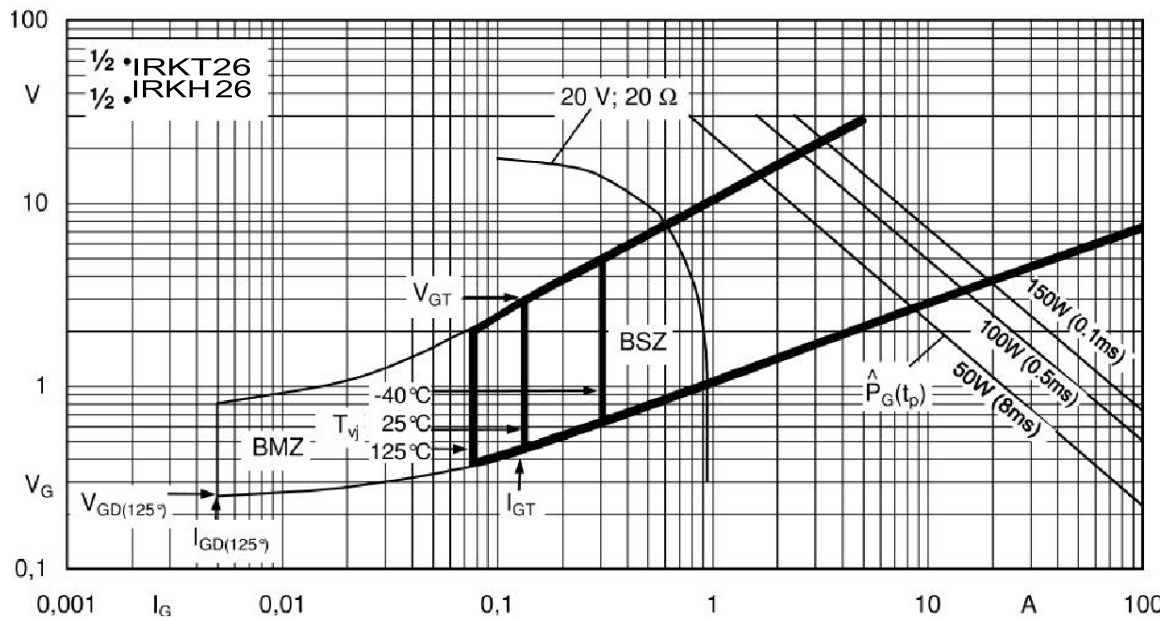
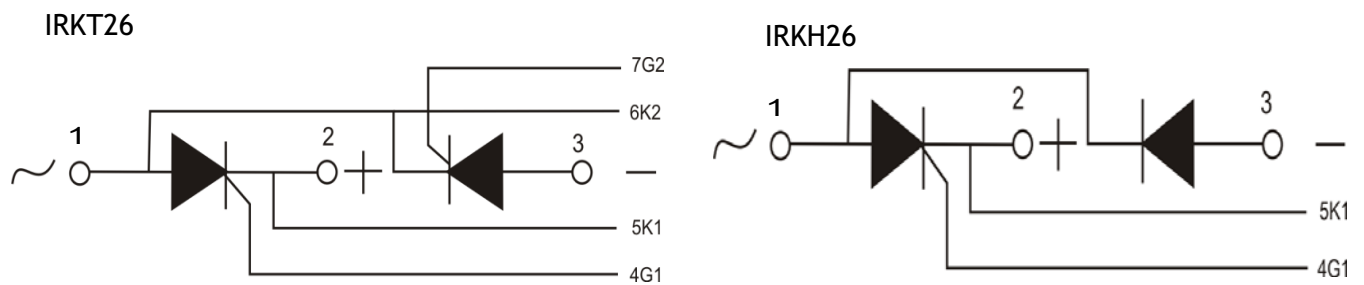
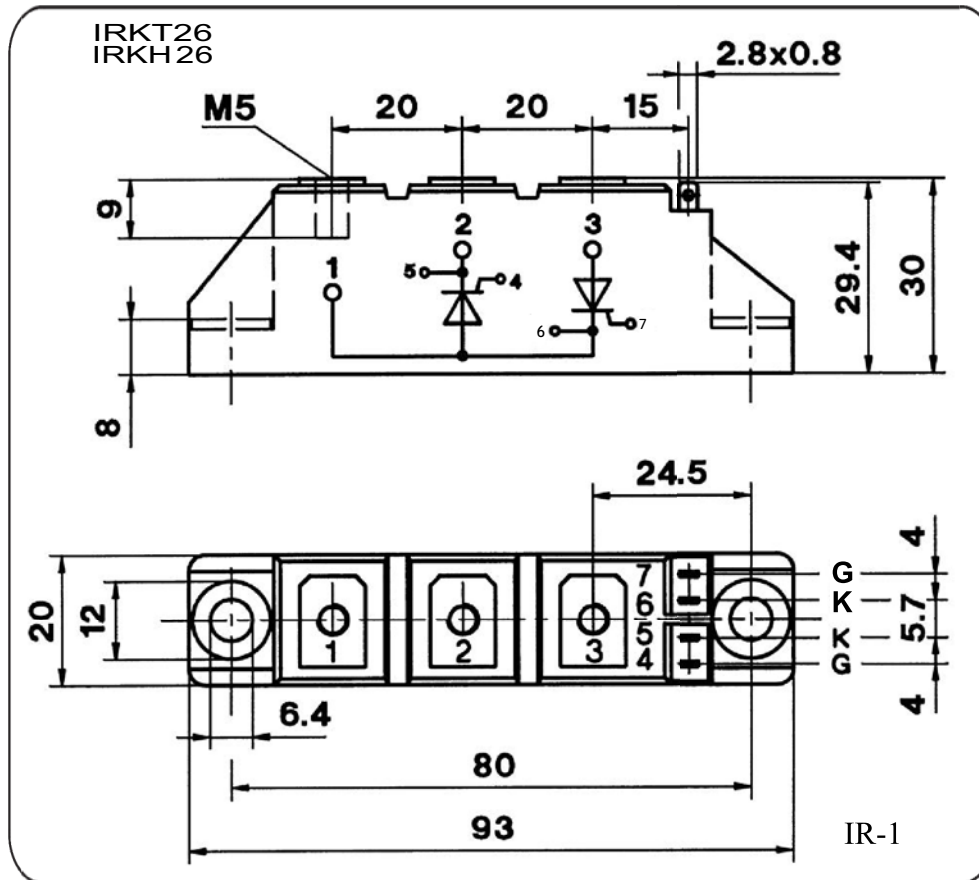


Fig. 9 Gate trigger characteristics

## CIRCUIT DIAGRAM



## PACKAGE OUTLINE



All dimension are in mm .

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