

FEATURES

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

TYPICAL APPLICATIONS

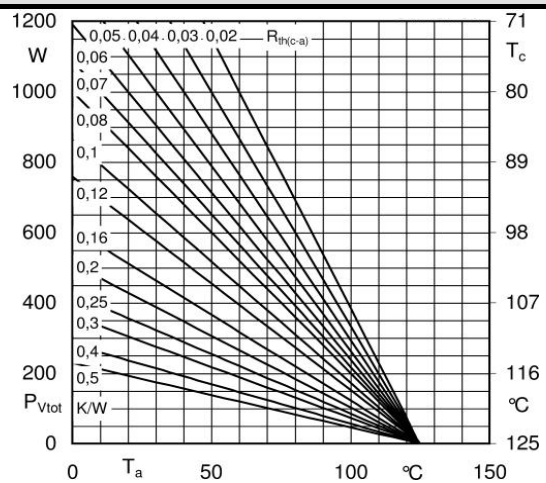
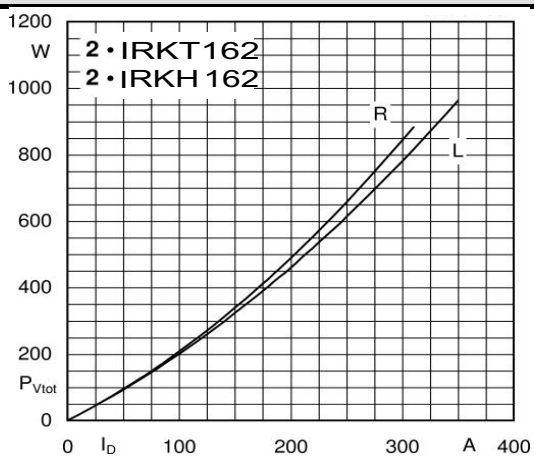
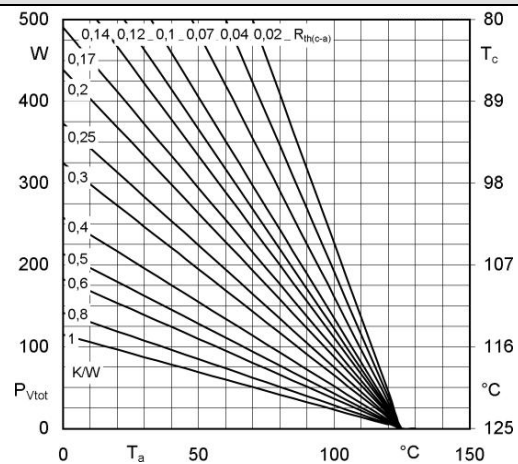
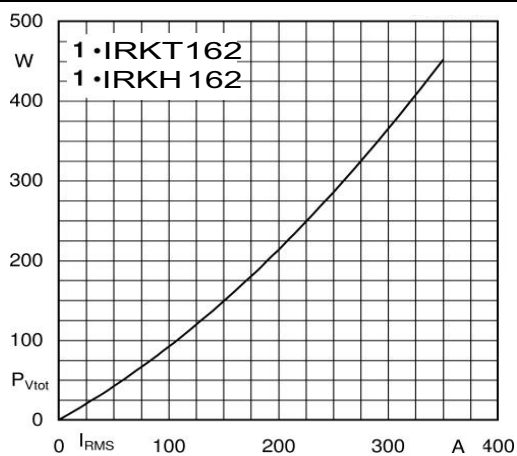
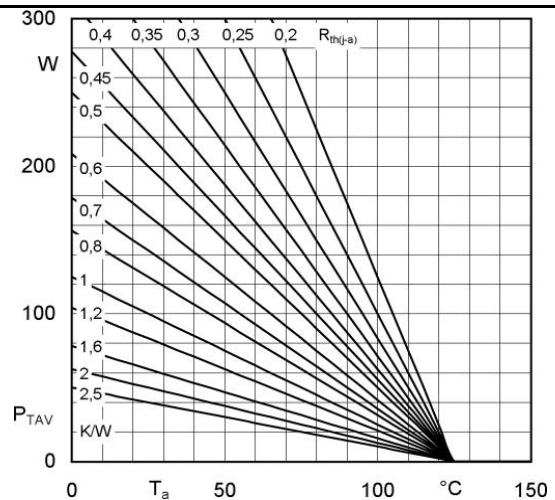
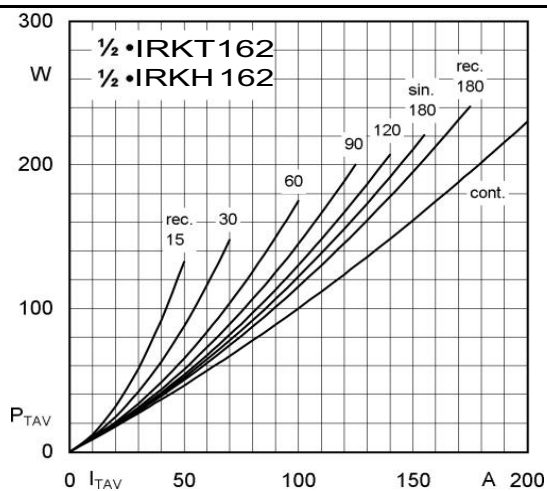
- DC motor control
- AC motor soft starters
- Temperature control for oven
- Chemical processes and professional light dimming

TECHNICAL DATA



DEVICE TYPE	V_{RRM} (V)	V_{RSM} (V)
IRKT162/12, IRKH162/12	1200	1300
IRKT162/16, IRKH162/16	1600	1700
IRKT162/20, IRKH162/20	2000	2100
IRKT162/22, IRKH162/22	2200	2300

SYMBOL	CONDITIONS	VALUES
I_{TAV} I_{RMS}	Sin. 180; $T_{case} = 85^{\circ}C$ $T_a = 45^{\circ}C$	156 amp. 265 amp.
I_{TSM} I^2_t	$T_{vj} = 25^{\circ}C$; 10 ms $T_{vj} = 25^{\circ}C$	5400 amp. 145000 A^2S
I_{RRM}/I_{DRM}	$T_{vj} = 25^{\circ}C$ $T_{vj} = 125^{\circ}C$	10 mA 40 mA
V_{TM} V_0 R_0	$T_{vj} = 25^{\circ}C$ ($I_F = 500$ Amp.); max $T_{vj} = 125^{\circ}C$ $T_{vj} = 125^{\circ}C$	1.60 V 0.850 V 1.5 m Ω
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 2.0 V 400 mA 1000 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	0.17/0.085 $^{\circ}C/W$ 0.18/0.009 $^{\circ}C/W$ 0.21/0.1 $^{\circ}C/W$ 125 $^{\circ}C$ 125 $^{\circ}C$
Mounting torque		5 Nm/Per bolt
Weight	Approx.	165 gm
$V_{(isol)}$	Ac 50 Hz rms 1 min	3000 volts
Package Outline		IR-2



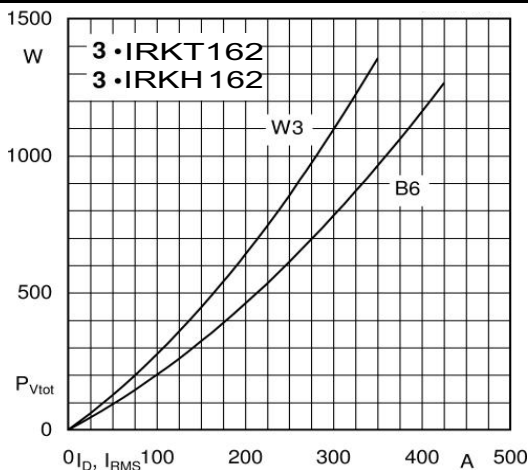


Fig. 4L Power dissipation of three modules vs. direct and rms current

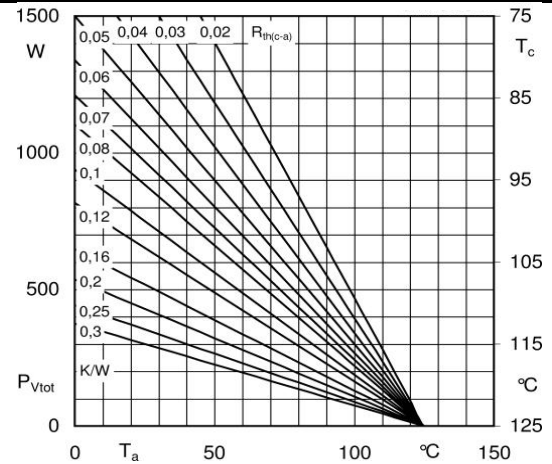


Fig. 4R Power dissipation of three modules vs. case temp.

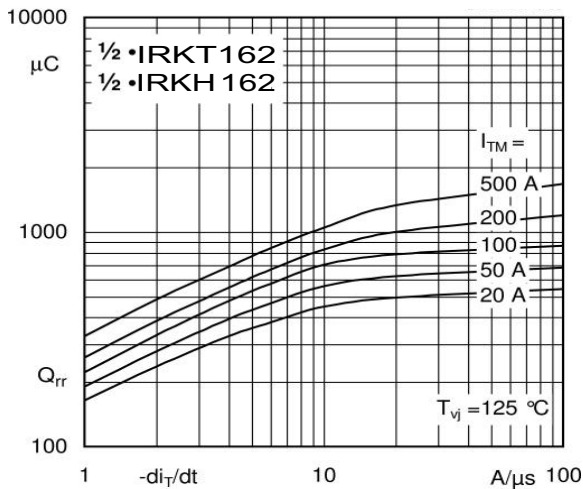


Fig. 5 Recovered charge vs. current decrease

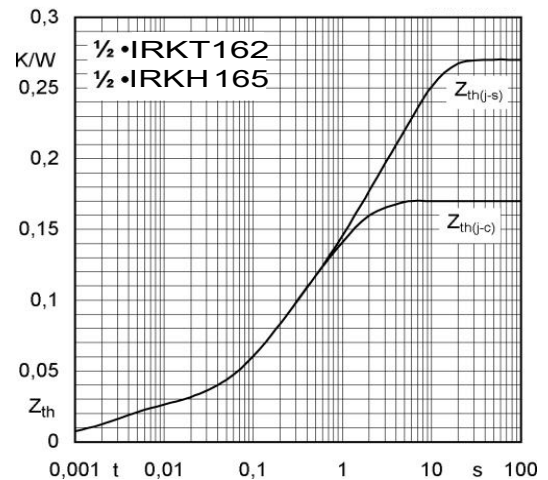


Fig. 6 Transient thermal impedance vs. time

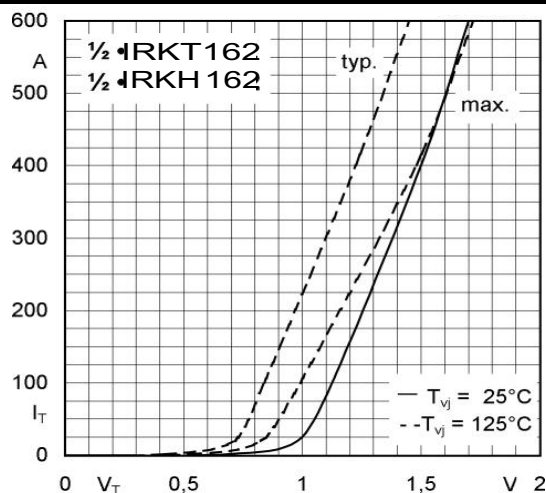


Fig. 7 On-state characteristics

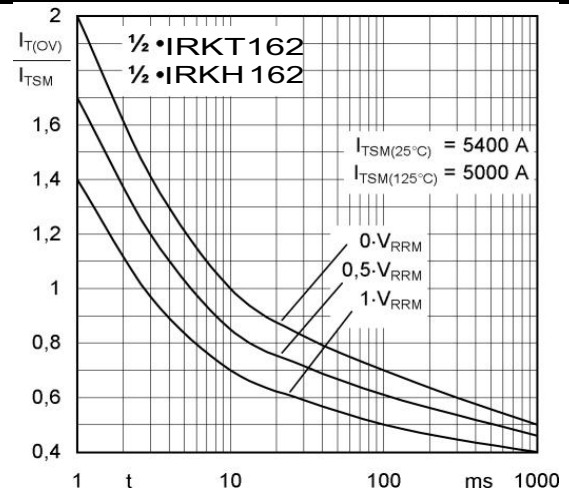


Fig. 8 Surge overload current vs. time

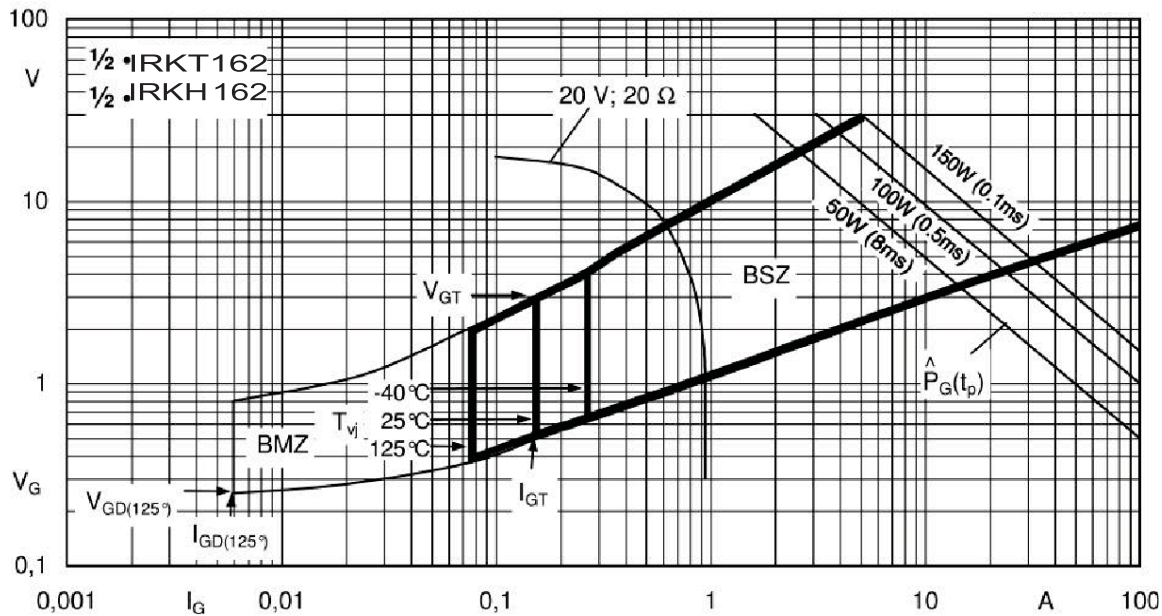
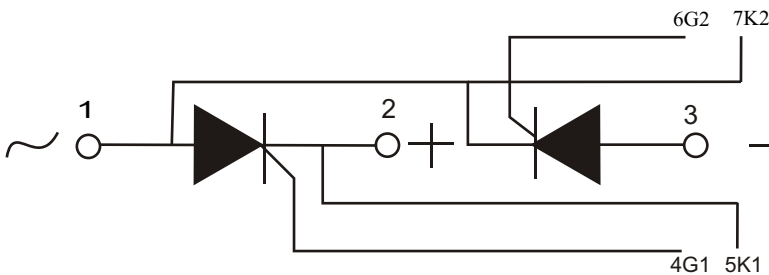


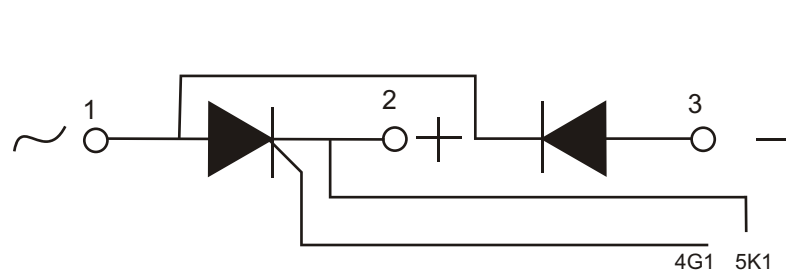
Fig. 9 Gate trigger characteristics

CIRCUIT DIAGRAM

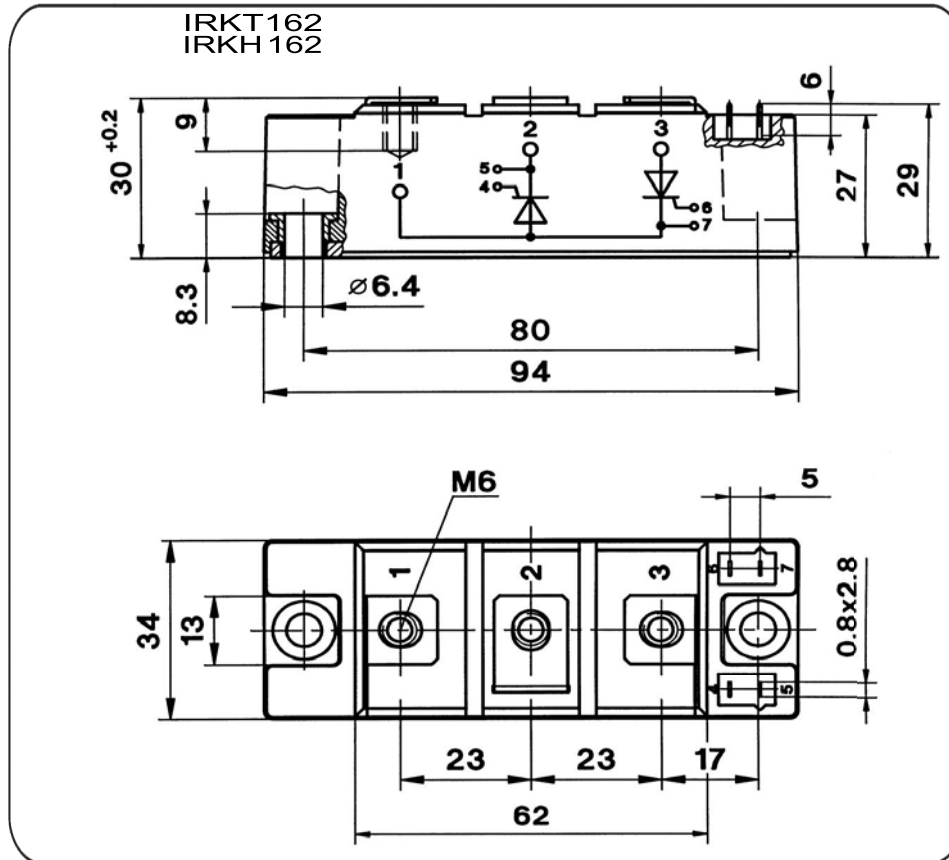
IRKT162



IRKH 162



PACKAGE OUTLINE



All dimension are in mm .

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