

FEATURES

- Heat transfer through ceramic.
- Isolated base mounting
- Precious metal pressure contacts for high reliability

TYPICAL APPLICATIONS

- DC motor control
- Free wheeling diodes
- Field supply for DC motors

TECHNICAL DATA

DEVICE TYPE	V _{RRM} (V)	V _{RSM} (V)
IRKE60012E	1200	1300
IRKE60014E	1400	1500
IRKE60016E	1600	1700



MODULE

SYMBOL	CONDITIONS	VALUES
I _{FAV}	Sin.180; T _{case} =100°C	600 amp.
I _{FSM}	T _{vj} =25°C; 10ms T _{vj} =150°C; 10ms	22000 amp. 18000 amp.
I ² t	T _{vj} =25°C; 8.3 ... 10ms T _{vj} =150°C; 8.3 ... 10ms	2420000 A ² S 1805000 A ² S
V _F	T _{vj} =25°C (I _F =3000 Amp.)	max.1.5 V
V _(TO)	T _{vj} =150°C	0.75 V
r _T	T _{vj} =150°C	0.25 mΩ
I _{RD}	T _{vj} =150°C; V _{RD} =V _{RRM}	15 mA
R _{th(j-c)}	Cont.; per diode = per module	0.07 K/W
R _{th(c-s)}	Sin. 180; per diode = per module	0.075 K/W
T _{vj}	per diode = per module	0.02 K/W
T _{stg}		-40°C.....+150°C -40°C.....+150°C
V _{isol}	a.c. 50 Hz; r.m.s.;1s/1min.	3600 / 3000
Mounting torque to heatsink		5±15% Nm
Mounting torque to terminals		17±15% Nm
Weight	Approx.	810 gms
Package outline		IR-5

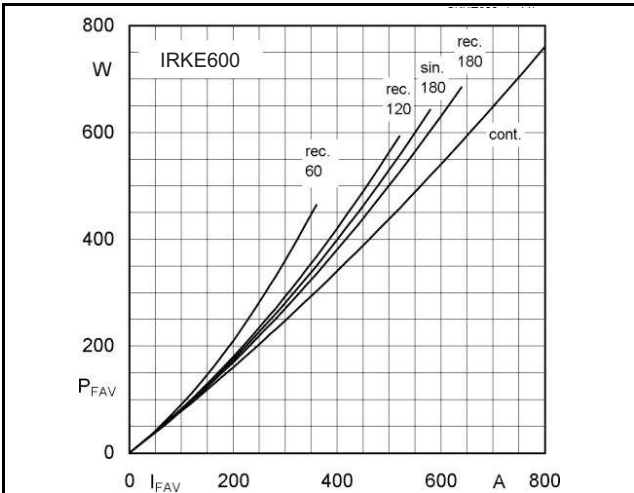


Fig. 11L Power dissipation per diode vs. forward current

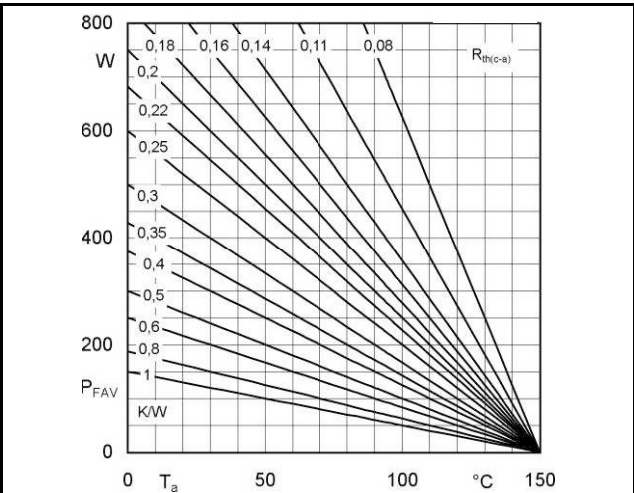


Fig. 11R Power dissipation per diode vs. ambient temperature

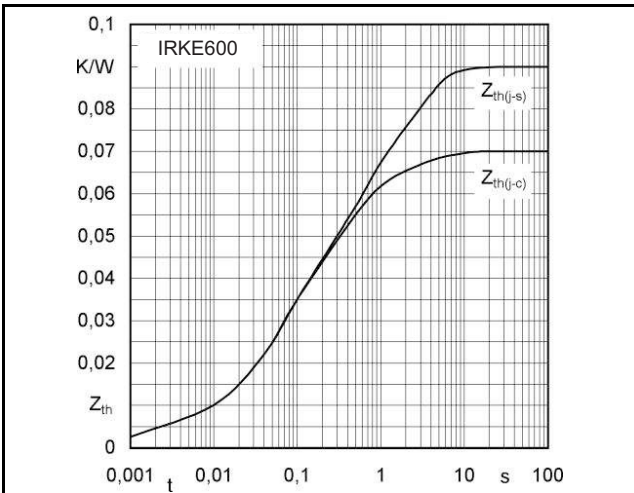


Fig. 14 Transient thermal impedance vs. time

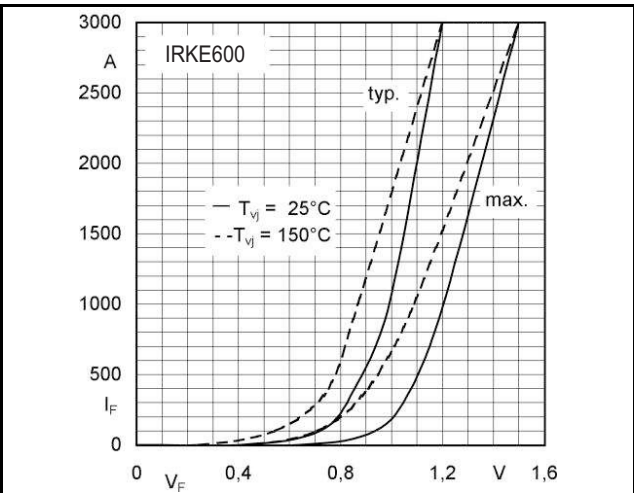


Fig. 15 Forward characteristics

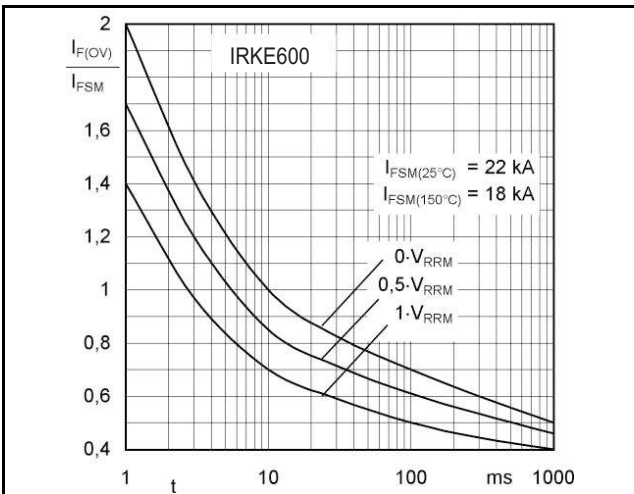


Fig. 16 Surge overload current vs. time

