

**Features :**

- International standard cases
- Hermetic metal cases with ceramic insulators
- Capsule packages for double sided cooling

**Typical Applications**

- High power industrial and power transmission
- DC and AC motor control
- AC controllers

**Part No. H50KSR-KS50dT**

<b>I<sub>T(AV)</sub></b>	<b>350A</b>
<b>V<sub>DRM</sub>, V<sub>RRM</sub></b>	<b>5600V 6000V</b>
	<b>6500V</b>

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>T(AV)</sub>	Mean on-state current	180° half sine wave 50Hz Double side cooled	125			350	A
I <sub>T(RMS)F</sub>	RMS current(sine wave)	Sine wave 50Hz Double side cooled				770	A
V <sub>DRM</sub>	Repetitive peak reverse voltage	tp=10ms	125	5600		6500	V
I <sub>DRM</sub>	Repetitive peak current	at V <sub>DRM</sub>	125			200	mA
I <sub>TSM</sub>	Surge on-state current	10ms half sine wave V <sub>R</sub> =0.6V <sub>RRM</sub>	125			4.5	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination					101	10 <sup>3</sup> A <sup>2</sup> s
V <sub>TO</sub>	Threshold voltage		125			1.25	V
r <sub>T</sub>	On-state slope resistance					2.20	mΩ
V <sub>TM</sub>	Peak on-state voltage	I <sub>TM</sub> =1000A, F=24kN	25			3.50	V
dv/dt	Critical rate of rise of off-state voltage	V <sub>DM</sub> =0.67V <sub>DRM</sub>	125			200	V/μs
di/dt	Critical rate of rise of on-state current	V <sub>DM</sub> = 67%V <sub>DRM</sub> Gate pulse t <sub>r</sub> ≤ 0.5μs I <sub>GM</sub> =1.5A Repetitive	125			100	A/μs
I <sub>GT</sub>	Gate trigger current	V <sub>A</sub> =12V, I <sub>A</sub> =1A	25	40		350	mA
V <sub>GT</sub>	Gate trigger voltage			0.8		3.5	V
I <sub>H</sub>	Holding current			20		400	mA
I <sub>L</sub>	Latching current					500	mA
V <sub>GD</sub>	Non-trigger gate voltage	V <sub>DM</sub> =67%V <sub>DRM</sub>	125			0.3	V
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	Double side cooled Clamping force 24kN				0.045	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink					0.008	
F <sub>m</sub>	Mounting force			19		26	kN
T <sub>vj</sub>	Junction temperature			-40		125	°C
T <sub>stg</sub>	Stored temperature			-40		140	°C
W <sub>t</sub>	Weight					440	g
Outline	KS50dT						

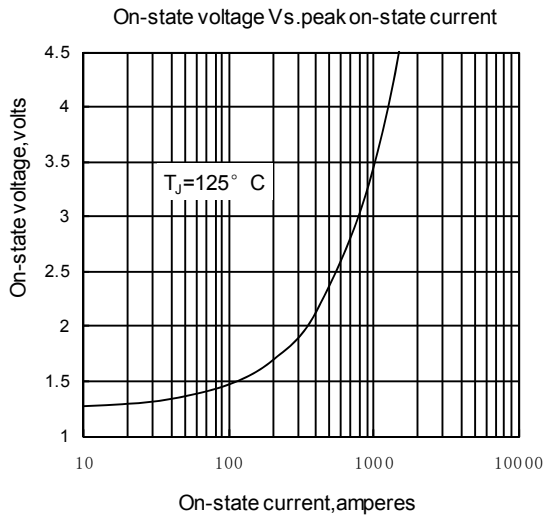


Fig1

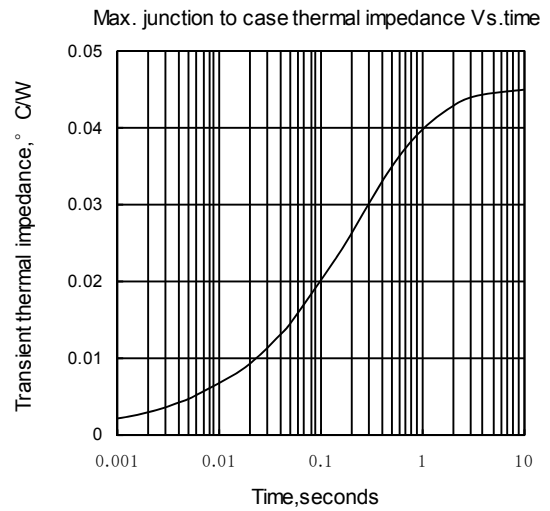


Fig2

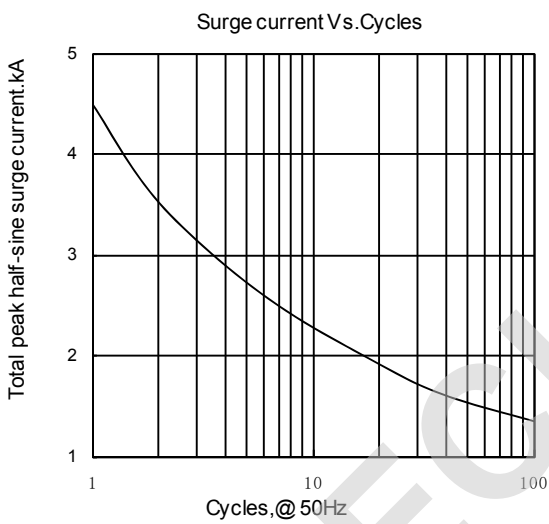


Fig3

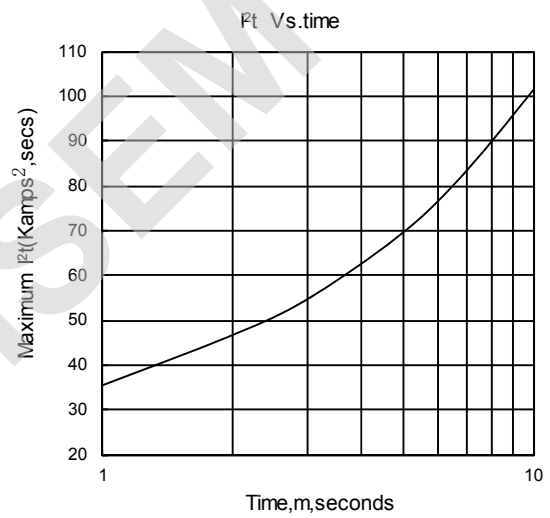


Fig4

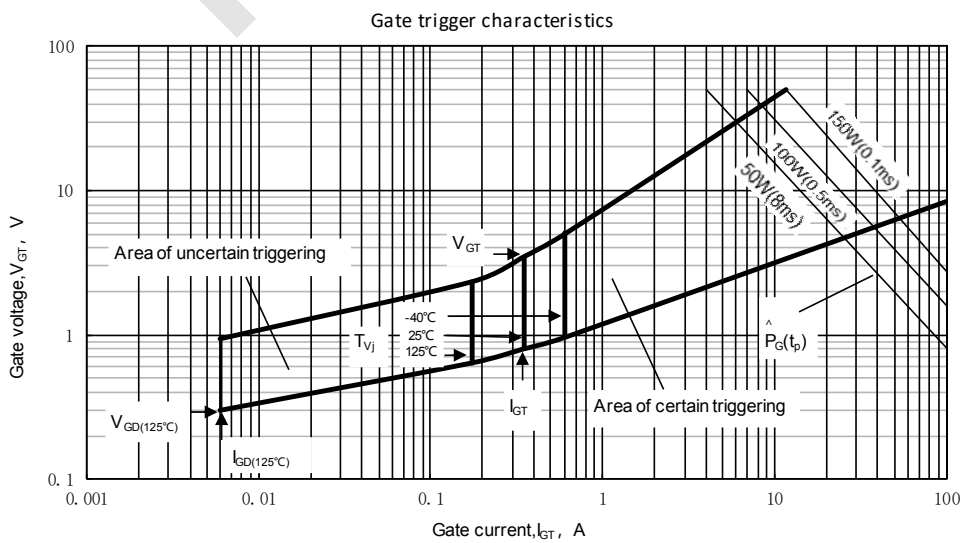
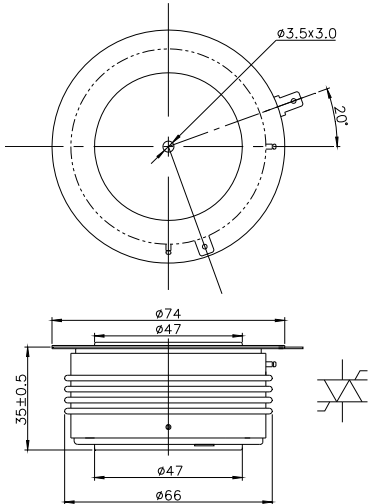


Fig.5

Outline:



TECHSEM reserves the right to change specifications without notice.

