

**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><math>I_{T(AV)}</math></b>	<b>350A</b>
<b><math>V_{DRM}, V_{RRM}</math></b>	<b>5600V 6000V 6500V</b>

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

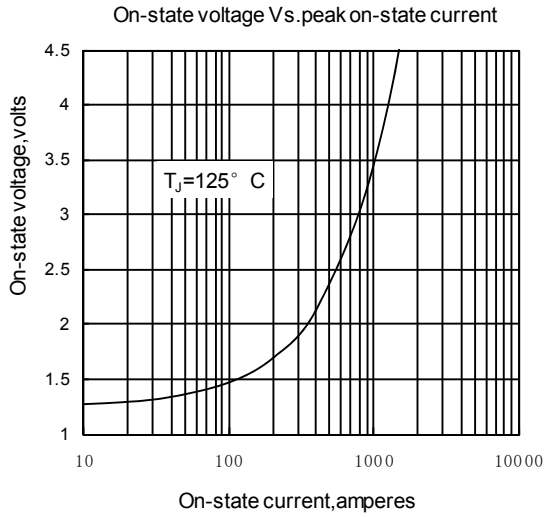


Fig1

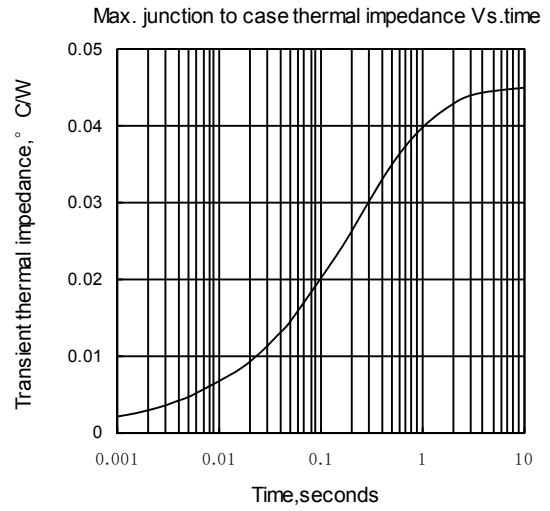


Fig2

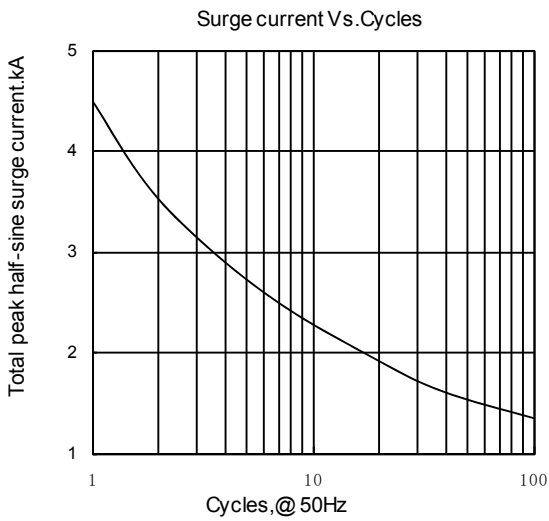


Fig3

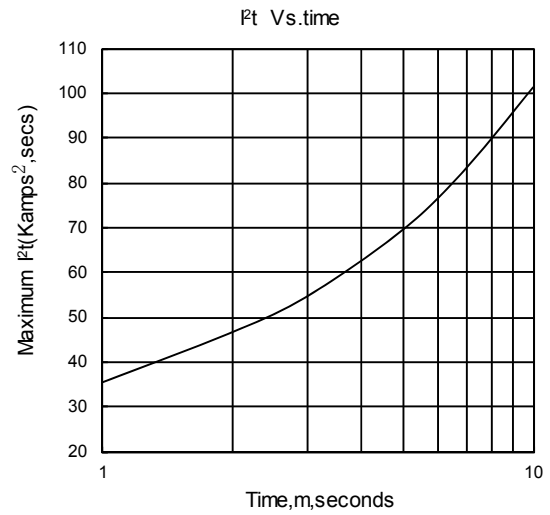


Fig4

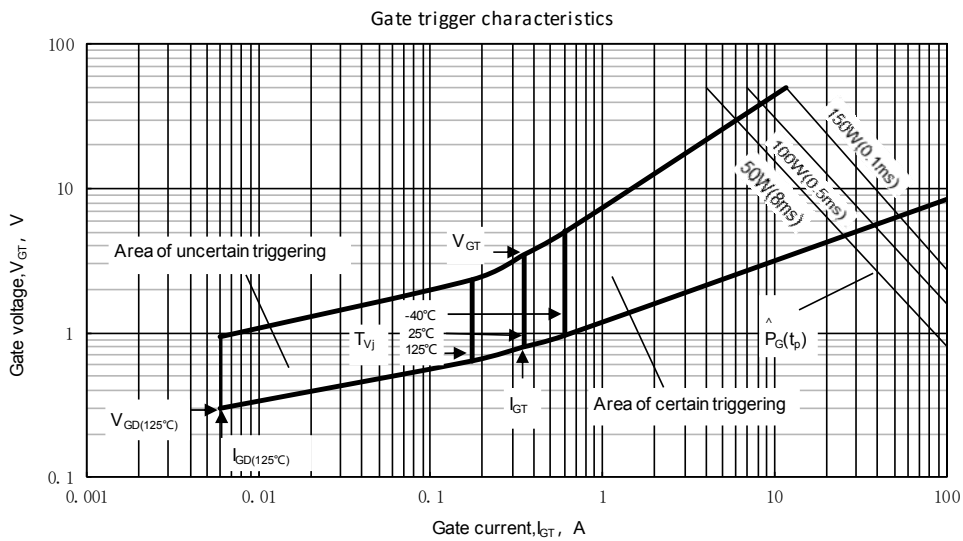
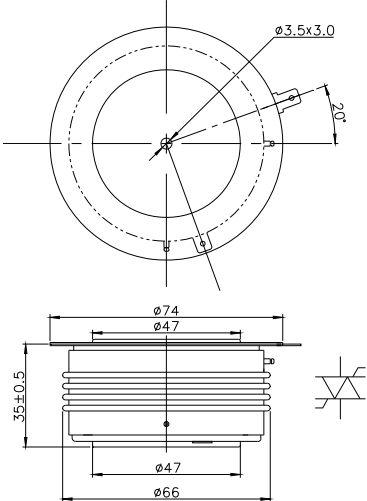


Fig.5

Outline:



TECHSEM reserves the right to change specifications without notice.