**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. H38KSR-KS33dT

$I_{T(AV)}$ 175A
 V_{DRM}, V_{RRM} 5600V 6000V
6500V

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180 half sine wave 50Hz Double side cooled	125			175	A
$I_{T(RMS)F}$	RMS current(sine wave)	Sine wave 50Hz Double side cooled				385	A
V_{DRM}	Repetitive peak reverse voltage	$t_p=10ms$	125	5600		6500	V
I_{DRM}	Repetitive peak current	at V_{DRM}	125			100	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			1.7	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				14.5	10^3A^2s
V_{TO}	Threshold voltage		125			1.10	V
r_T	On-state slope resistance					2.30	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=500A, F=15kHz$	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	$V_{DM}=67\%V_{DRM}$ to 1000A, 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	20		200	mA
V_{GT}	Gate trigger voltage			0.8		2.5	V
I_H	Holding current			20		150	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				0.045	C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink	Clamping force 15kN				0.008	
F_m	Mounting force			10		20	kN
T_{vj}	Junction temperature			-40		125	°C
T_{stg}	Stored temperature			-40		140	°C
W_t	Weight				300		g
Outline	KS33dT						

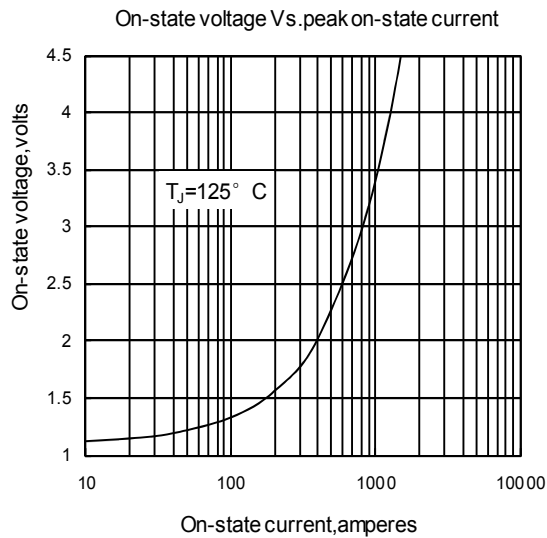


Fig1

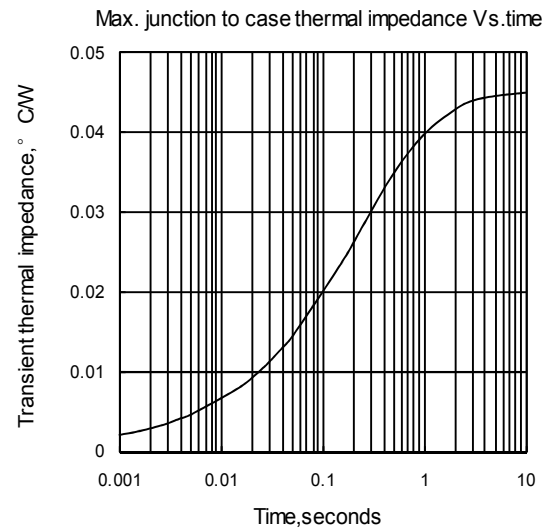


Fig2

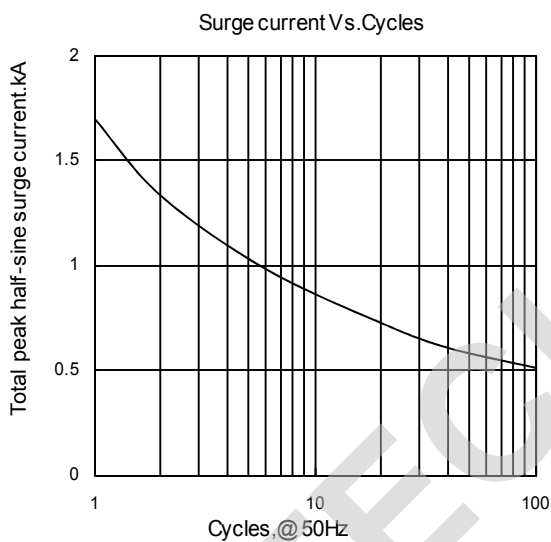


Fig3

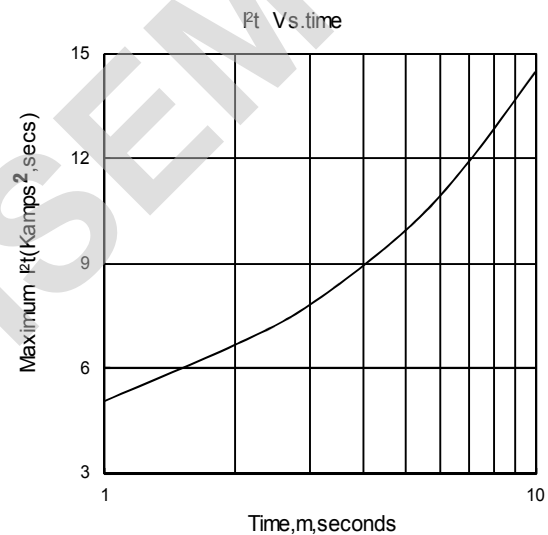


Fig4

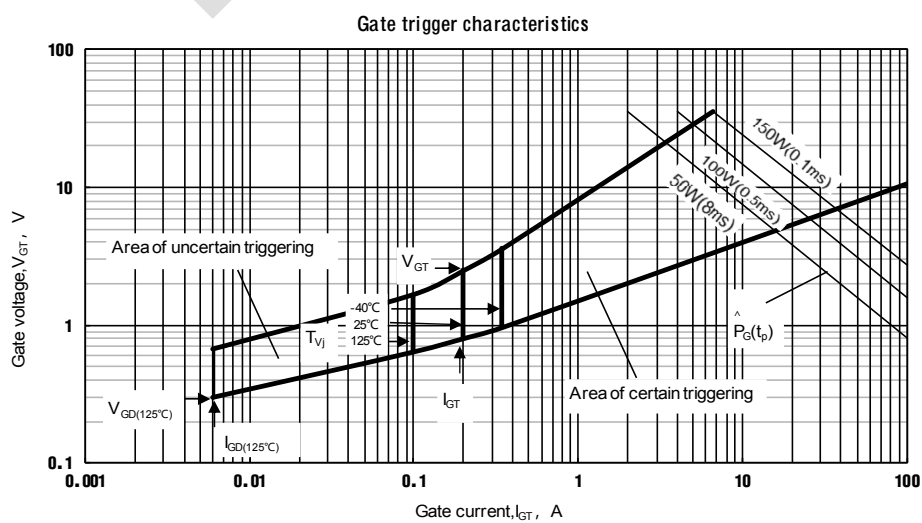
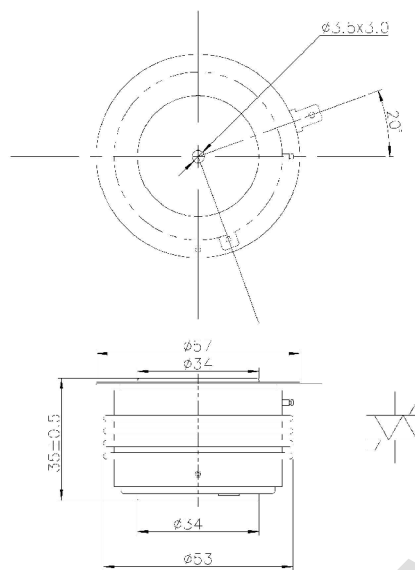


Fig.5

Outline:



TECHSEM reserves the right to change specifications without notice.