

Features:

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

Typical Applications

- n High power industrial and power transmission
- n DC and AC motor control
- n 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		T _C =70°C			385
V _{DRM}	Repetitive peak reverse voltage	tp=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 V _R =0.6V _{RRM}	125			1.7	kA
I ² t	I ² t for fusing coordination						14.5
V _{TO}	Threshold voltage		125			1.10	V
r _T	On-state slope resistance						2.30
V _{TM}	Peak on-state voltage	I _{TM} =500A, F=15kN	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 ≤0.5μs 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 Clamping force 15kN				0.045	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink					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						

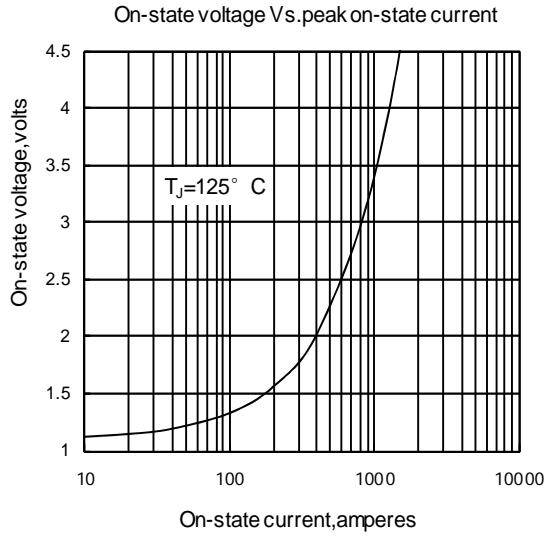


Fig 1

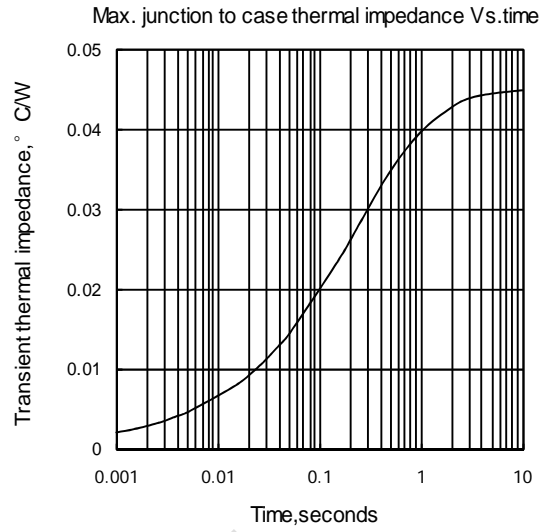


Fig 2

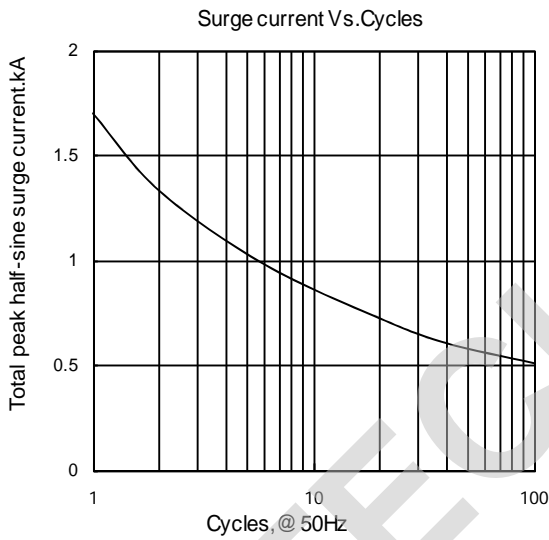


Fig 3

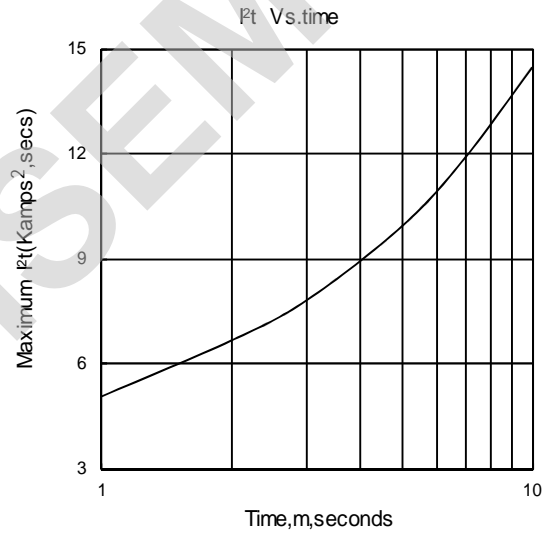


Fig 4

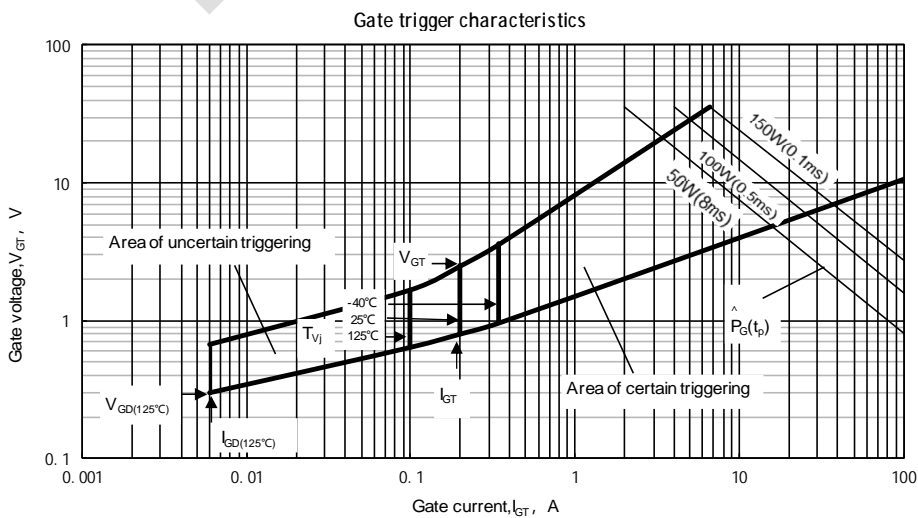
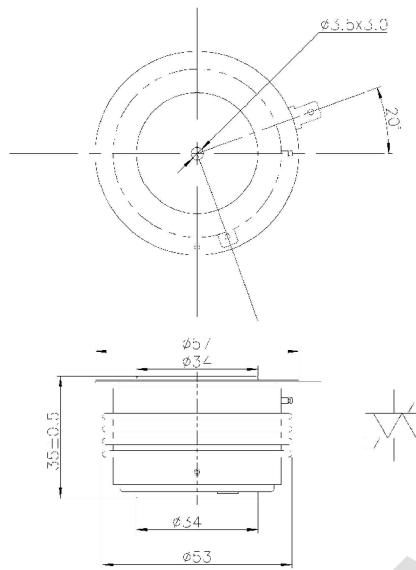


Fig.5

Outline:



TECHSEM reserves the right to change specifications without notice.

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