

Features :

- n Two anti-parallel thyristors on one Si-wafer
- n Hermetic metal cases with ceramic insulators
- n Capsule packages for double sided cooling

Typical Applications

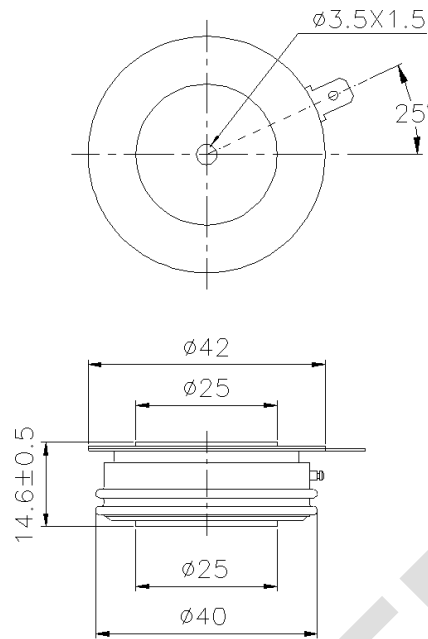
- n High power industrial and power transmissior
- n DC and AC motor control
- n AC controllers

Part No. Y30KSE-KT25aT

I_{T(RMS)}	520A	
V_{DRM}, V_{RRM}	500V	800V
	1000V	1200V
	1400V	1600V
	1800V	

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T _j (°C)	VALUE			UNIT
					Min	Type	Max	
I _{T(RMS)}	RMS current	50Hz sine wave Double side cooled,	T _c =55°C T _c =85°C	125			730 520	A
V _{DRM}	Repetitive peak reverse voltage	V _{DRM} tp=10ms V _{DSM} = V _{DRM} +100V		125	500		1800	V
I _{DRM}	Repetitive peak current	at V _{DRM}		125			30	mA
I _{TSM}	Surge on-state current	10ms half sine wave		125			5.0	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}					125	A ² s*10 ³
V _{TO}	Threshold voltage			125			0.85	V
r _T	On-state slope resistance						1.85	mΩ
V _{TM}	Peak on-state voltage	I _{TM} =450A, F=7.0kN		25			2.70	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =0.67V _{DRM}		125			50	V/μs
di/dt	Critical rate of rise of on-state current	V _{DM} = 67%V _{DRM} to 800A, Gate pulse t _r ≤0.5μs I _{GM} =1.5A Repetitive		125			50	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		200	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 7.0kN					0.045	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink						0.010	
F _m	Mounting force				5.3		10	kN
T _{vj}	Junction temperature				-40		125	°C
T _{stg}	Stored temperature				-40		140	°C
W _t	Weight					80		g
Outline	KT25aT							

Outline:



TECHSEM reserves the right to change specifications without notice.

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