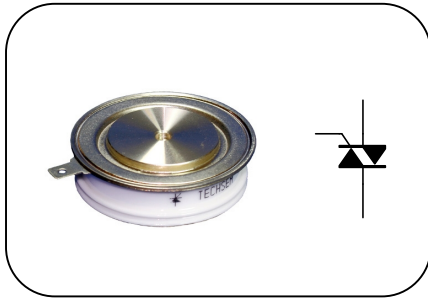


**Features:**

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

Typical Applications

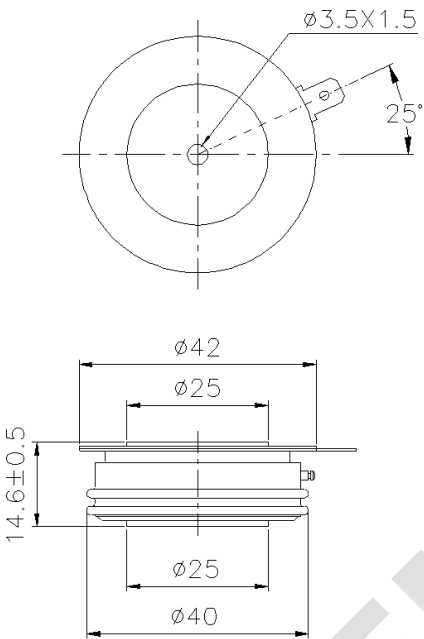
High power industrial and power transmissior
DC and AC motor control
AC controllers

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, $T_C=55^{\circ}C$ $T_C=85^{\circ}C$	125			730 520	A
V_{DRM}	Repetitive peak reverse voltage	$V_{DRM} \text{ tp}=10\text{ms}$ $V_{DSM} = V_{DRM} + 100V$	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^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$	125			125	$A^2s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slope resistance		125			1.85	m Ω
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 $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$ 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.