KS300A Bi-directlonal Thyristor

Feature

- Tow anti-paralled thyristors on si-wafer
- Hermetic metal cases with ceramic insulators
- Capsule packages for doubble sided cooling

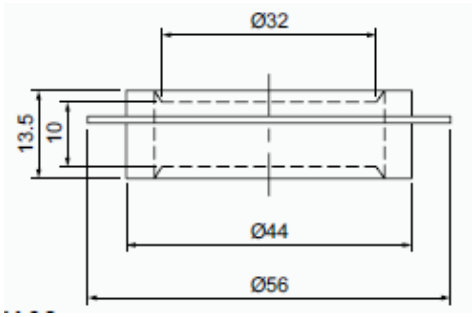
Typical Application

- High power industrical and power transmissior
- DC ang AC motor control
- AC controllers

$I_{T(AV)}$	300A
V_{DRM}/V_{RRM}	100-2000V
I_{TMS}	2.5KA
I^2t	125 10^3a^2s

SYMBOL	CHARCTERISTIC	TEST CONDITIONS	T_J (℃)	VALUE		UNIT
				Min	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wawe 50Hz Double side cooled, THS=97℃	125		300	A
$I_{T(RMS)}$	RMS current	180° half sine wawe 50Hz Double side cooled, THS=55℃	125		640	A
V_{DRM}	Repettive peak reverse voltage	V_{DRM}&V_{RRM} tp=10ms V_{DSM}&V_{RSM}=V_{DRM}&$V_{RRM+100V}$	125	100	2000	V
I_{DRM}	Repetitive peak current	V_{DM}=V_{DRM} V_{RM}=V_{RRM}	125		30	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=0.6V_{RRM}	125		2.5	KA
I^2t	I^2t for fusing coordination				125	A^{2S}*10
V_{TO}	Threshold voltage		125		0.85	V
r_T	On-state slop resistance				1.85	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=628A,F=15KN	25		2.4	V
dv/dt	Critical rate of rise of-state voltage	V_{DM}=0.67V_{DRM}	125		500	V/us
di/dt	Critical rate of rise of on-state current	V_{DM}=67%V_{DRM} TO 1000A, Gate pulse tr≤0.5us I_{GM}=1.5A	125		50	A/us
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
$R_{th(j-h)}$	Thermal resistance Junction to heat sink	At180° sine double side cooled Clamping force 5.0kn			0.065	℃/W
F_M	Mounting force			5.3	10	KN
T_{stq}	Stored temperature			-40	140	℃
W_t	Weight					g
Outline						

Outline: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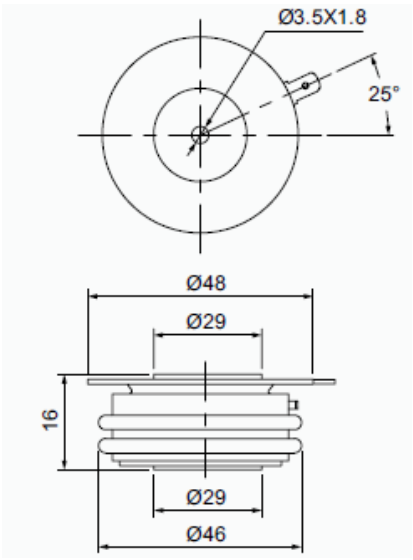
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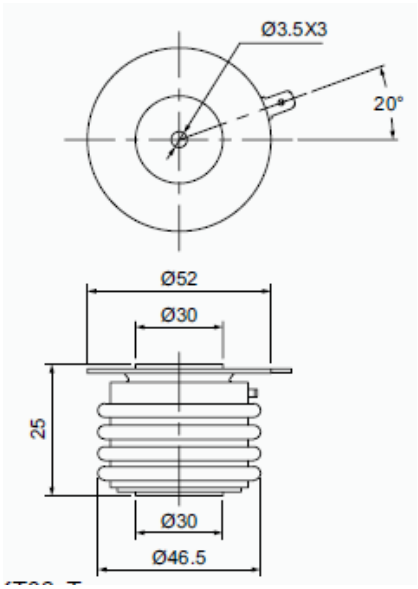
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