

### 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 transmission
- DC and AC motor control
- AC controllers

$I_{T(RMS)}$  **750A**  
 $V_{DRM}/V_{RRM}$  **500~1800V**  
 $I_{TSM}$  **7.6 kA**  
 $I^2t$  **288 A<sup>2</sup>s\*10<sup>3</sup>**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT	
				Min	Type	Max		
I <sub>T(RMS)</sub>	RMS current	50Hz sine wave Double side cooled,	T <sub>C</sub> =55°C	125			1060	A
			T <sub>C</sub> =85°C	125			750	
V <sub>DRM</sub>	Repetitive peak reverse voltage	V <sub>DRM</sub> tp=10ms V <sub>DSM</sub> = V <sub>DRM</sub> +100V	125	500		1800	V	
I <sub>DRM</sub>	Repetitive peak current	V <sub>DM</sub> = V <sub>DRM</sub>	125			40	mA	
I <sub>TSM</sub>	Surge on-state current	10ms half sine wave V <sub>R</sub> =0.6V <sub>RRM</sub>	125			7.6	kA	
I <sup>2</sup> t	I <sup>2</sup> T for fusing coordination					288	A <sup>2</sup> s*10 <sup>3</sup>	
V <sub>TO</sub>	Threshold voltage		125			0.84	V	
r <sub>T</sub>	On-state slop resistance					1.01	mΩ	
V <sub>TM</sub>	Peak on-state voltage	I <sub>TM</sub> =900A, F=15kN	125			1.75	V	
dv/dt	Critical rate of rise of off-state voltage	V <sub>DM</sub> =0.67V <sub>DRM</sub>	125			50	V/μs	
di/dt	Critical rate of rise of on-state current	V <sub>DM</sub> = 67%V <sub>DRM</sub> to 1000A, Gate pulse t <sub>r</sub> ≤0.5μs I <sub>GM</sub> =1.5A Repetitive	125			50	A/μs	
I <sub>GT</sub>	Gate trigger current	V <sub>A</sub> =12V, I <sub>A</sub> =1A	25	20		300	mA	
V <sub>GT</sub>	Gate trigger voltage			0.8		3.0	V	
I <sub>H</sub>	Holding current			20		300	mA	
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	double side cooled Clamping force 15kN				0.035	°C /W	
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink					0.008		
F <sub>m</sub>	Mounting force			10		20	kN	
T <sub>stg</sub>	Stored temperature			-40		140	°C	
W <sub>t</sub>	Weight				240		g	
Outline	KT33cT							

Outline:

