

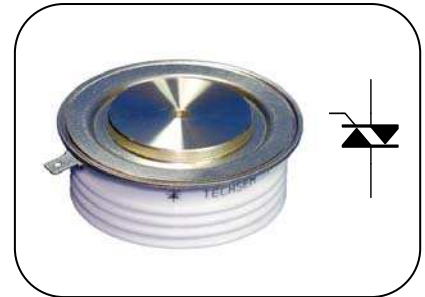
Features:

- 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

$I_{T(RMS)}$ **930A**
 V_{DRM}/V_{RRM} **500~1800V**
 I_{TSM} **8.8 KA**
 I^2t **387 A²s*10³**



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	125			1330	A
			T _C =85°C	125			930	
V _{DRM}	Repetitive peak reverse voltage	V _{DRM} tp=10ms V _{DSM} = V _{DRM} +100V		125	500		1800	V
I _{DRM}	Repetitive peak current	V _{DM} = V _{DRM}		125			50	mA
I _{TSM}	Surge on-state current	10ms half sine wave		125			8.8	kA
I ² t	I ² T for fusing coordination	V _R =0.6V _{RRM}					387	A ² s*10 ³
V _{TO}	Threshold voltage			125			0.78	V
r _T	On-state slop resistance						0.89	mΩ
V _{TM}	Peak on-state voltage	I _{TM} =1200A, F=18kN		125			1.85	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 1000A, 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		350	mA
V _{GT}	Gate trigger voltage		0.8			3.5	V	
I _H	Holding current		20			400	mA	
R _{th(j-c)}	Thermal resistance Junction to case	double side cooled Clamping force 18kN					0.028	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink						0.0075	
F _m	Mounting force				15		20	kN
T _{stg}	Stored temperature				-40		140	°C
W _t	Weight					320		g
Outline	KT39cT40							

Outline:

