

Features:

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

Typical Applications

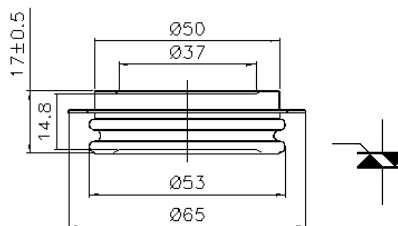
- n High power industrial and power transmissior
- n DC and AC motor control
- n AC controllers

Part No. Y40KSEA-KA37

I_{T(RMS)}	830A
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			1210	A
			T _C =85°C			830	
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			50	mA
I _{TSM}	Surge on-state current	10ms half sine wave	125			7.8	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}				304	A ² s*10 ³
V _{TO}	Threshold voltage		125			1.00	V
r _T	On-state slope resistance					0.85	mΩ
V _{TM}	Peak on-state voltage	I _{TM} =1200A, F=18kN	125			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 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
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 18kN				0.030	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink					0.008	
F _m	Mounting force			15		20	kN
T _{vj}	Junction temperature			-40		125	°C
T _{stg}	Stored temperature			-40		140	°C
W _t	Weight				200		g
Outline	KA37						

Outline:



TECHSEM reserves the right to change specifications without notice.