



Features:

- n Center amplifying gate
- n Metal case with ceramic insulator
- n Low on-state and switching losses

Typical Applications:

- n AC controllers
- n DC and AC motor control
- n Controlled rectifiers

Part No. H125KPS-KT110cT

I_{T(AV)}	3000A
V_{DRM}, V_{R RM}	7200V
	7500V

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT	
				Min	Type	Max		
I _{T(AV)}	Mean on-state current	180° half sine wave 50Hz Double side cooled	T _c =53°C	90		3000	A	
I _{DRM} I _{RRM}	Repetitive peak current	at V _{DRM} tp=10ms at V _{RRM} tp=10ms		90		800	mA	
I _{TSM}	Surge on-state current	10ms half sine wave		90		55	kA	
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}				15125	10 ³ A ² s	
V _{TO}	Threshold voltage			90		1.15	V	
r _T	On-state slope resistance					0.26	mΩ	
V _{TM}	Peak on-state voltage	I _{TM} =3000A, F=120kN		25		1.90	V	
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =0.67V _{DRM}		90		2000	V/μs	
di/dt	Critical rate of rise of on-state current	V _{DM} =67%V _{DRM} , Gate pulse t _r ≤ 0.5μs I _{GM} =1.5A		90		100	A/μs	
Q _{rr}	Recovery charge	I _{TM} =2000A, tp=4000μs, di/dt=-5A/μs, V _R =50V		90	6000		μC	
I _{GT}	Gate trigger current				40	300	mA	
V _{GT}	Gate trigger voltage	V _A =12V, I _A =1A		25	0.8	3.0	V	
I _H	Holding current				25	250	mA	
V _{GD}	Non-trigger gate voltage	V _{DM} =67%V _{DRM}		90		0.3	V	
R _{th(j-c)}	Thermal resistance Junction to case	Double side cooled				0.004	°C / W	
R _{th(c-h)}	Thermal resistance case to heatsink	Clamping force 120kN				0.001		
F _m	Mounting force				110	120	140	kN
T _{vj}	Junction temperature				-40		90	°C
T _{stg}	Stored temperature				-40		140	°C
W _t	Weight					3420		g
Outline	KT110dT							

Outline:

