



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. H125KPU-KT110dT

I_{T(AV)}	2800A
V_{DRM}, V_{RRM}	8000V
	8500V

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 =55°C	90			2800	A
I _{DRM} I _{RRM}	Repetitive peak current	at V _{DRM} tp=10ms at V _{RRM} tp=10ms		90			700	mA
I _{TSM}	Surge on-state current	10ms half sine wave		90			40	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}					8000	10 ³ A ² s
V _{TO}	Threshold voltage			90			0.92	V
r _T	On-state slope resistance						0.32	mΩ
V _{TM}	Peak on-state voltage	I _{TM} =3000A, F=120kN		25			1.95	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		6500		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		200	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:

