

Features :

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

Typical Applications :

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

$I_{T(AV)}$	3000A
V_{DRM}/V_{RRM}	7200 ~ 7500V
I_{TSM}	55 kA
I^2t	15125 10³A²s

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^2t	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	D.C. Double side cooled Clamping force 120kN				0.004	°C / W
R _{th(c-h)}	Thermal resistance case to heatsink					0.001	
F _m	Mounting force			110	120	140	kN
T _{vj}	Junction temperature			-40		90	°C
T _{slg}	Stored temperature			-40		140	°C
W _t	Weight					3420	g
Outline	P31						

Outline:

