

### 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

$I_{T(AV)}$	<b>1000A</b>
$V_{DRM}/V_{RRM}$	<b>8000 ~ 8500V</b>
$I_{TSM}$	<b>10.5 kA</b>
$I^2t$	<b>551 10<sup>3</sup>A<sup>2</sup>S</b>

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT	
				Min	Type	Max		
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled	T <sub>c</sub> =70°C	115			1000	A
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	at V <sub>DRM</sub> tp=10ms at V <sub>RRM</sub> tp=10ms		115			600	mA
$I_{TSM}$	Surge on-state current	10ms half sine wave		115			10.5	kA
$I^2t$	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>		115			551	10 <sup>3</sup> A <sup>2</sup> s
V <sub>TO</sub>	Threshold voltage			115			1.38	V
r <sub>T</sub>	On-state slope resistance			115			0.90	mΩ
V <sub>TM</sub>	Peak on-state voltage	I <sub>TM</sub> =1500A, F=32kN		25			2.80	V
dv/dt	Critical rate of rise of off-state voltage	V <sub>DM</sub> =0.67V <sub>DRM</sub>		115			2000	V/μs
di/dt	Critical rate of rise of on-state current	V <sub>DM</sub> =67%V <sub>DRM</sub> , Gate pulse t <sub>r</sub> ≤0.5μs I <sub>GM</sub> =1.5A		115			200	A/μs
Q <sub>rr</sub>	Recovery charge	I <sub>TM</sub> =2000A, tp=4000μs, di/dt=-5A/μs, V <sub>R</sub> =50V		115		3800		μC
I <sub>GT</sub>	Gate trigger current			25	40		300	mA
V <sub>GT</sub>	Gate trigger voltage	V <sub>A</sub> =12V, I <sub>A</sub> =1A		25	0.8		3.0	V
I <sub>H</sub>	Holding current			25	25		200	mA
V <sub>GD</sub>	Non-trigger gate voltage	V <sub>DM</sub> =67%V <sub>DRM</sub>		115			0.3	V
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	D.C. Double side cooled					0.011	°C/W
R <sub>th(c-h)</sub>	Thermal resistance case to heatsink	Clamping force 32kN					0.003	
F <sub>m</sub>	Mounting force				27	32	34	kN
T <sub>vj</sub>	Junction temperature				-40		115	°C
T <sub>stg</sub>	Stored temperature				-40		140	°C
W <sub>t</sub>	Weight					1140		g
Outline	P25							

Outline:

