

#### 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>1500A</b>
$V_{DRM}/V_{RRM}$	<b>8000 ~ 8500V</b>
$I_{TSM}$	<b>17 kA</b>
$I^2t$	<b>1445 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		1500	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			17	kA
$I^2t$	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				1445	10 <sup>3</sup> A <sup>2</sup> s
V <sub>TO</sub>	Threshold voltage		115			1.35	V
r <sub>T</sub>	On-state slope resistance					0.53	mΩ
V <sub>TM</sub>	Peak on-state voltage	I <sub>TM</sub> =1500A, F=70kN	25			2.00	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		5000		μC
I <sub>GT</sub>	Gate trigger current			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		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				0.009	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heatsink	Clamping force 70kN				0.002	
F <sub>m</sub>	Mounting force			63	70	84	kN
T <sub>vj</sub>	Junction temperature			-40		115	°C
T <sub>slg</sub>	Stored temperature			-40		140	°C
W <sub>t</sub>	Weight				1920		g
Outline	P28a						

Outline:

