

**Features**

- Low forward voltage drop
- Soft recovery
- Hermetic metal cases with ceramic insulators

**I<sub>F(AV)</sub> 4000 A**  
**V<sub>RRM</sub> 2100 ~ 3000V**  
**t<sub>rr</sub> 12 μs**

**Typical Applications**

- Inverters and choppers
- Motor control
- Snubber and free-wheeling diodes

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T <sub>j</sub> (°C)	VALUE			UNIT	
					Min	Type	Max		
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Double side cooled,	T <sub>c</sub> =85°C	150			4000	A	
V <sub>RRM</sub>	Repetitive peak reverse voltage	t <sub>p</sub> =10ms		150	2100		3000	V	
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>		150			300	mA	
I <sub>FSM</sub>	Surge forward current	10ms half sine wave		150			44	kA	
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>						9680	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage			150			0.96	V	
r <sub>F</sub>	Forward slope resistance							0.12	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =5000A, F=35kN		25			2.20	V	
I <sub>rm</sub>	Reverse recovery current			150		350		A	
t <sub>rr</sub>	Reverse recovery time	I <sub>FM</sub> =2000A, t <sub>p</sub> =4000μs, di/dt=-60A/μs, V <sub>R</sub> =100V				12			μs
Q <sub>rr</sub>	Recovery charge					4300			μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	D.C. double side cooled Clamping force 40kN					0.007	°C/W	
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink						0.002		
F <sub>m</sub>	Mounting force				63		84	kN	
T <sub>vj</sub>	Junction temperature				-40		150	°C	
T <sub>stg</sub>	Stored temperature				-40		160	°C	
W <sub>t</sub>	Weight					1390		g	
Outline	P47								

**Outline:**

