

### Features

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

$I_{F(AV)}$       **780 A**  
 $V_{RRM}$         **1100~2000V**  
 $t_{rr}$             **3.0 $\mu$ s**

### 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	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,	T <sub>C</sub> =70°C	125			780	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms		125	1100		2000	V
$I_{RRM}$	Repetitive peak current	at V <sub>RRM</sub>		125			40	mA
$I_{FSM}$	Surge forward current	10ms half sine wave		125			10	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>					500	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage			125			1.31	V
r <sub>F</sub>	Forward slope resistance						0.37	mΩ□
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =2400A, F=15kN		125			2.20	V
I <sub>rm</sub>	Reverse recovery current			125		76		A
t <sub>rr</sub>	Reverse recovery time	I <sub>FM</sub> =1000A, tp=2000 $\mu$ s, -di/dt=60A/ $\mu$ s, V <sub>R</sub> =50V				3.0		$\mu$ s
Q <sub>rr</sub>	Recovery charge					114		$\mu$ C
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 15kN					0.035	°C/W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink					0.008		
F <sub>m</sub>	Mounting force				10		20	kN
T <sub>stg</sub>	Stored temperature				-40		160	°C
W <sub>t</sub>	Weight					220		g
Outline								

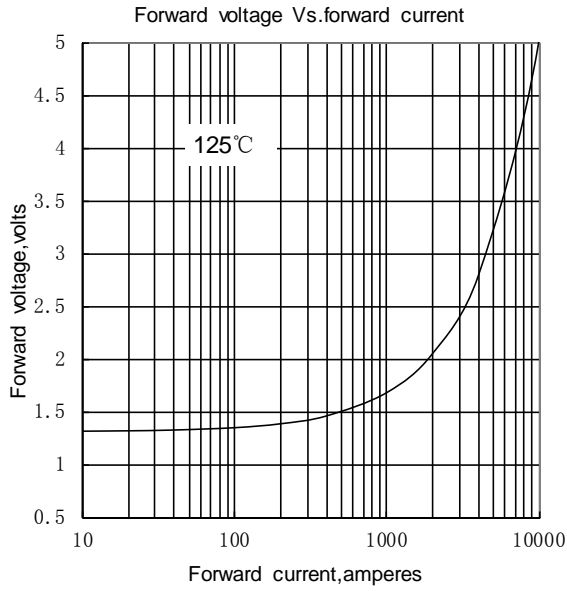


Fig.1

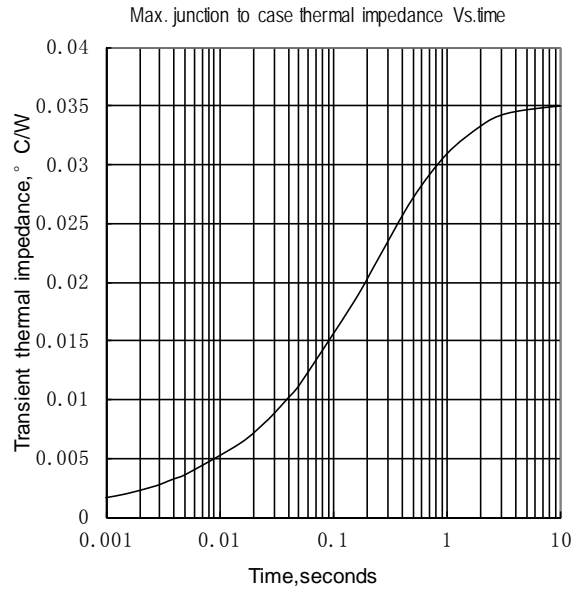


Fig.2

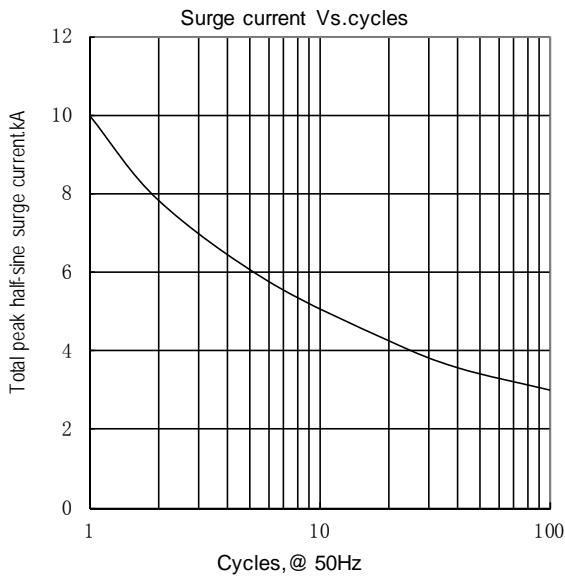


Fig.3

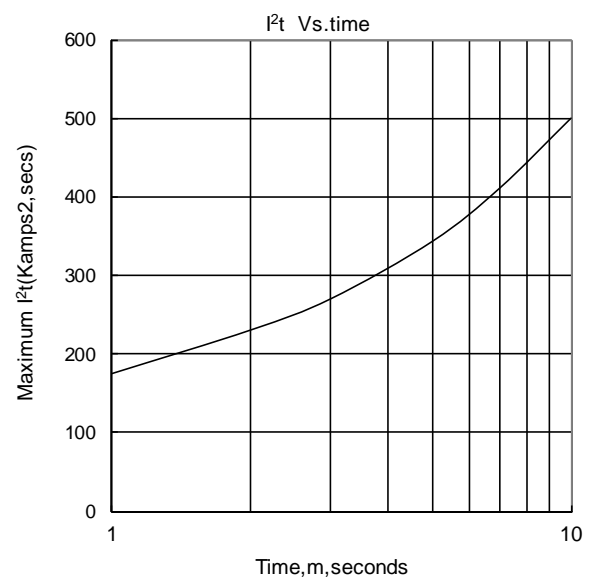


Fig.4

Outline:

