

#### Features

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

$I_{F(AV)}$       **1110 A**  
 $V_{RRM}$         **2100~3000V**  
 $t_{rr}$             **7.0 $\mu$ 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 <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Double side cooled,	T <sub>C</sub> =70°C	125			1110	A	
V <sub>RRM</sub>	Repetitive peak reverse voltage	tp=10ms		125	2100		3000	V	
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>		125			80	mA	
I <sub>FSM</sub>	Surge forward current	10ms half sine wave		125			16	kA	
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>						1280	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage			125			1.40	V	
r <sub>F</sub>	Forward slope resistance							0.39	mΩ□
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =1500A, F=24kN		125			1.99	V	
I <sub>rm</sub>	Reverse recovery current			125		166		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					7		$\mu$ s
Q <sub>rr</sub>	Recovery charge						500		$\mu$ C
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine double side cooled					0.020	°C/W	
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink	Clamping force 24kN					0.005		
F <sub>m</sub>	Mounting force				19		26	kN	
T <sub>stg</sub>	Stored temperature				-40		160	°C	
W <sub>t</sub>	Weight					440		g	
Outline									

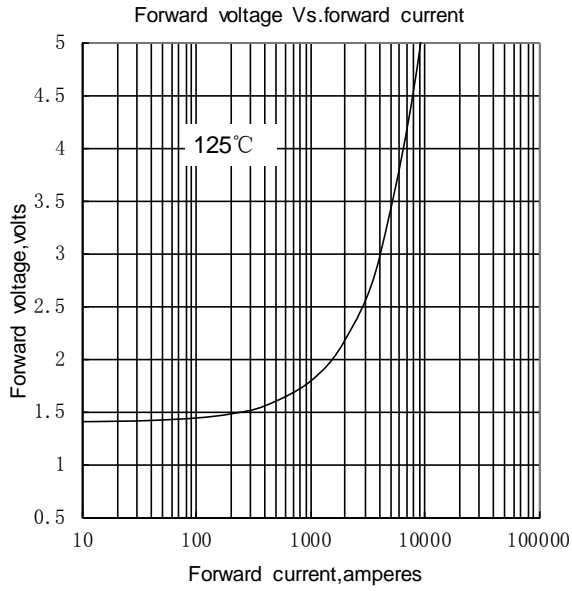


Fig.1

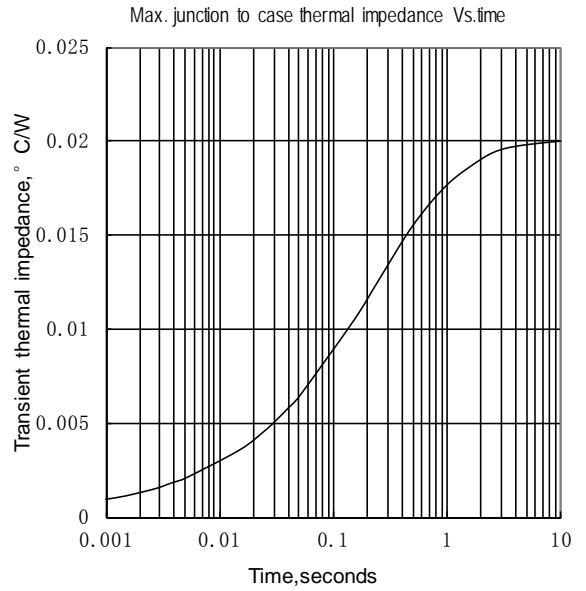


Fig.2

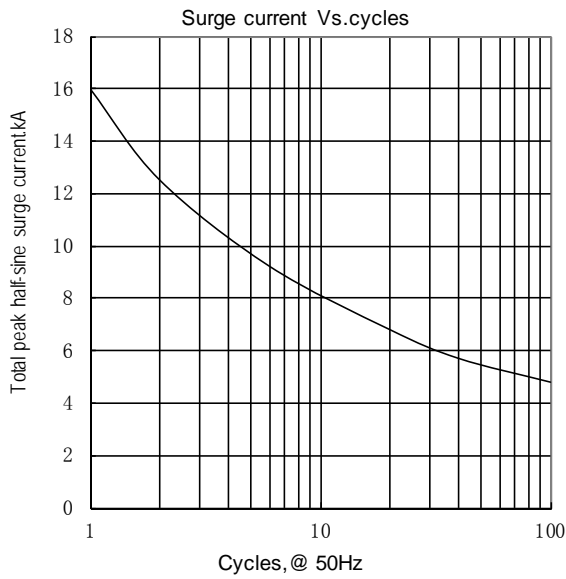


Fig.3

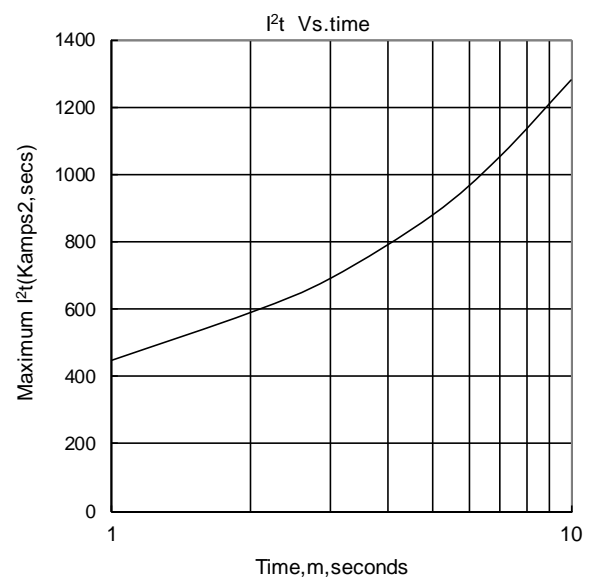


Fig.4

Outline:

