

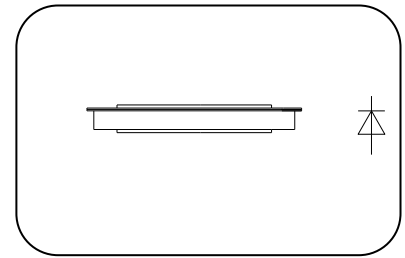
## Features

- Optimized for high current rectifiers
- Very low threshold voltage and slop resistance
- Very low thermal resistance

## Typical Applications

- High current application For Welders up to 10000Hz
- Electrode plating

$I_{F(AV)}$	<b>5000 A</b>
$V_{RRM}$	<b>200~400 V</b>
$I_{FSM}$	<b>45 kA</b>
$I^2t$	<b>10000 10<sup>3</sup>A<sup>2</sup>s</b>



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled, T <sub>c</sub> =100°C	175			5000	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms	175	200		400	V
$I_{RRM}$	Repetitive peak current	at V <sub>RRM</sub>	175			50	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	175			45	kA
$I^2t$	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0V <sub>RRM</sub>				10000	10 <sup>3</sup> A <sup>2</sup> s
$V_{FO}$	Threshold voltage	I <sub>F</sub> =5000-15000A	175			0.82	V
r <sub>F</sub>	Forward slope resistance					0.032	mΩ
$V_{FM}$	Min Peak on-state voltage	I <sub>FM</sub> =5000A, F=30kN	25			1.10	V
I <sub>rr</sub>	Recovery current	I <sub>FM</sub> =1000A, tp=2000μs, di/dt=-20A/μs, V <sub>R</sub> =50V	175			40	A
t <sub>rr</sub>	Recovery time					3.0	μs
Q <sub>rr</sub>	Recovery charge					100	μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	DC double side cooled Clamping force 30.0kN				0.010	°C/W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink				0.005		
F <sub>m</sub>	Mounting force			20		40	kN
T <sub>stg</sub>	Stored temperature			-40		175	°C
W <sub>t</sub>	Weight				140		g
Outline	P56						

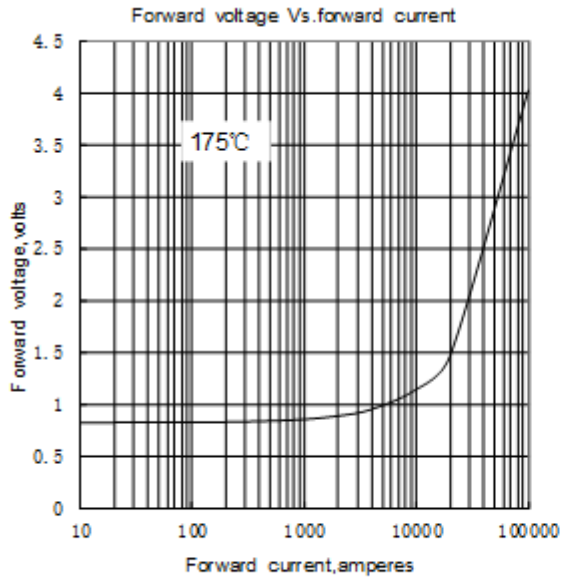


Fig.1

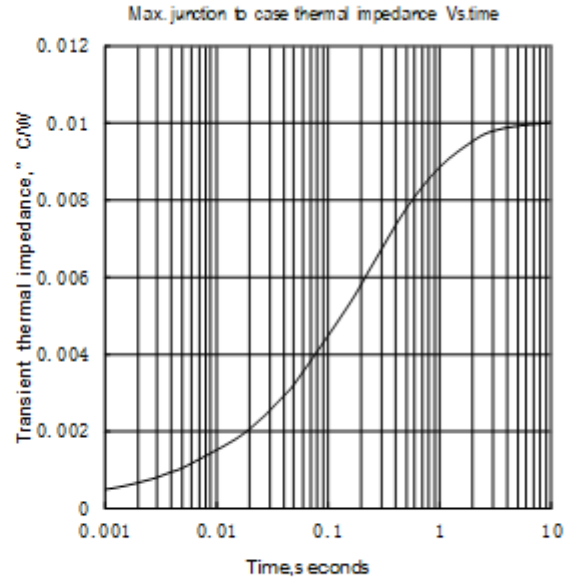


Fig.2

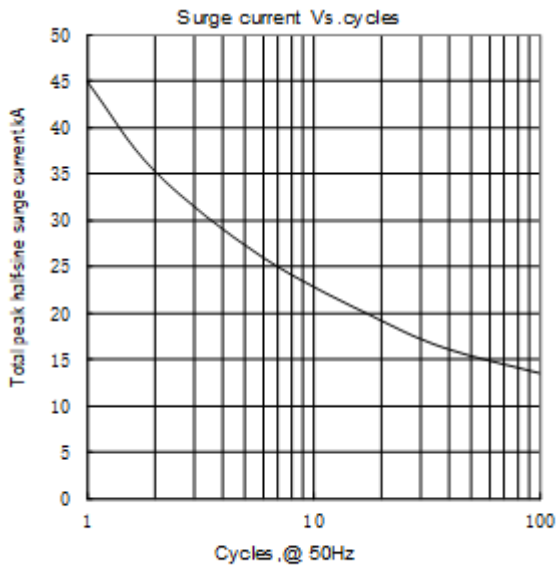
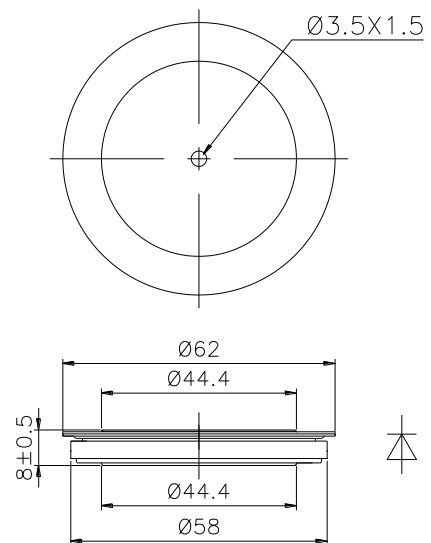


Fig.3



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