

**Features**

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

$I_{F(AV)}$       **630A**  
 $V_{RRM}$         **1100~2000V**  
 $t_{rr}$             **3.0μs**

**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			630	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	tp=10ms	125	1100		2000	V
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	125			30	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave	125			7.5	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				281	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		125			1.30	V
r <sub>F</sub>	Forward slope resistance					0.42	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =1200A, F=7.0kN	125			1.80	V
I <sub>rm</sub>	Reverse recovery current	I <sub>FM</sub> =1000A, tp=2000μs, -di/dt=60A/μs, V <sub>R</sub> =50V	125		42		A
t <sub>rr</sub>	Reverse recovery time				3.0		μs
Q <sub>rr</sub>	Recovery charge				63		μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	DC double side cooled Clamping force 7.0kN				0.045	°C/W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink					0.010	
F <sub>m</sub>	Mounting force			5.3		10	kN
T <sub>stg</sub>	Stored temperature			-40		160	°C
W <sub>t</sub>	Weight					80	g
Outline	P33						

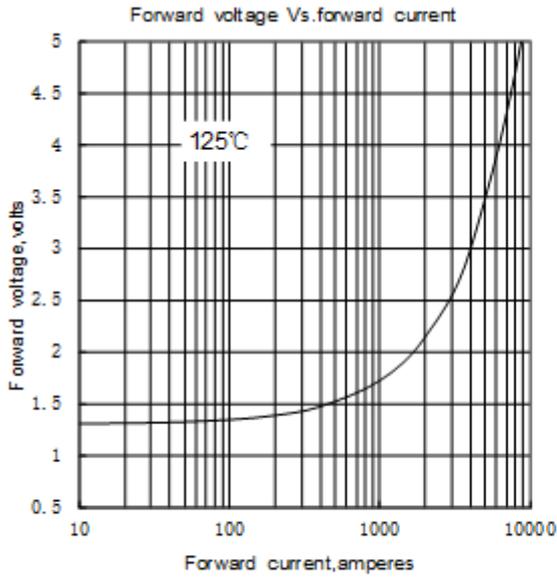


Fig.1

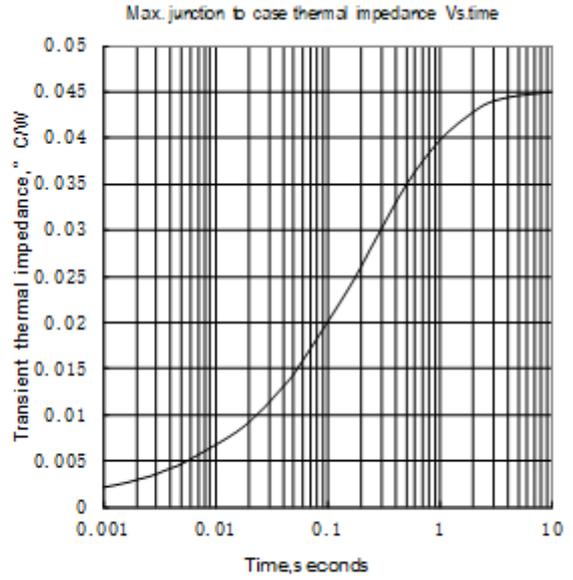


Fig.2

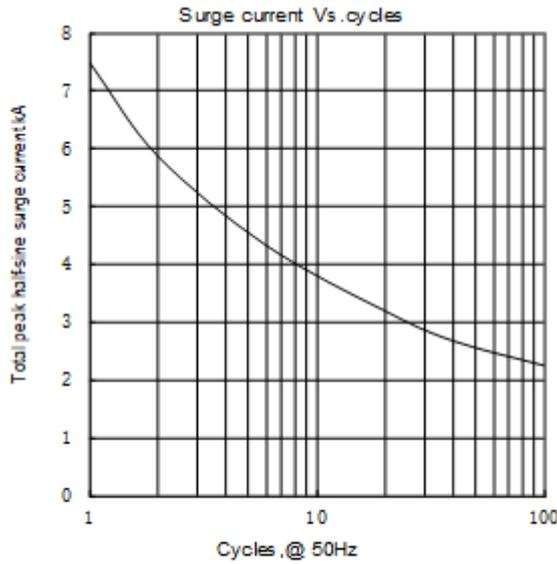
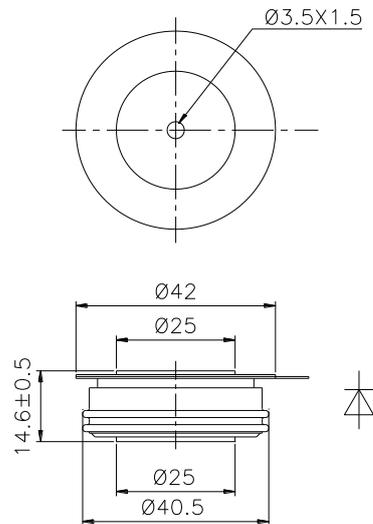


Fig.3



Nlps reserves the right to change specifications without notice.