

**Features**

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

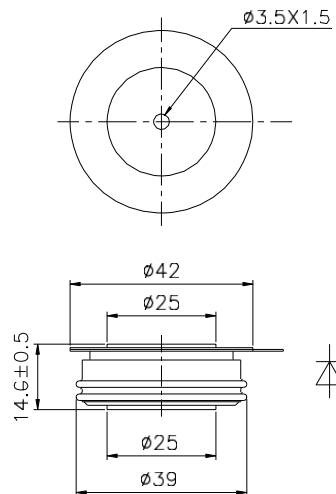
**I<sub>F(AV)</sub> 780 A**  
**V<sub>RRM</sub> 200 ~ 1000V**  
**trr 3.0 μs**

**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			780	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	tp=10ms		150	200		1000	V
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>		150			40	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave		150			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			150			1.17	V
r <sub>F</sub>	Forward slope resistance						0.36	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>TM</sub> =1200A, F=7.0kN		25			2.60	V
I <sub>rm</sub>	Reverse recovery current	I <sub>TM</sub> =1000A, tp=4000μs, di/dt=-60A/μs, V <sub>R</sub> =100V		150		46		A
t <sub>rr</sub>	Reverse recovery time					3.0		μs
Q <sub>rr</sub>	Recovery charge					70	90	μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	D.C. 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>vj</sub>	Junction temperature				-40		150	°C
T <sub>stg</sub>	Stored temperature				-40		160	°C
W <sub>t</sub>	Weight					80		g
Outline	P33a							

**Outline:**



Nlps reserves the right to change specifications without notice.