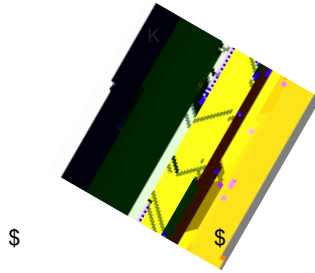


7 U H Q F K 0 2 6 % D U U L H U 6 F K R W W N \ 5 H

## TSP L300P6

### SMP6

K



\$

Cathode K  Anode A

### Features

- Advanced trench technology
- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

### Applications

- DC/DC Converters
- AC/DC Adaptors
- Switching Power Supplies
- Freewheeling Diodes

### Maximum ratings and electrical characteristics (T<sub>J</sub> = 25°C unless otherwise noted)

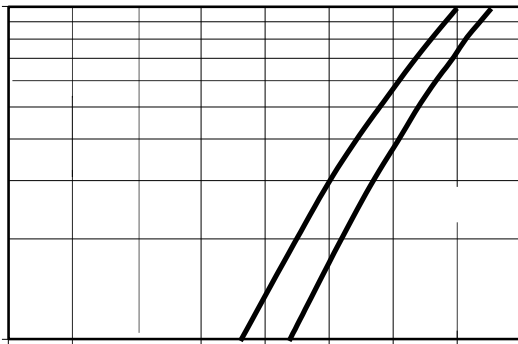
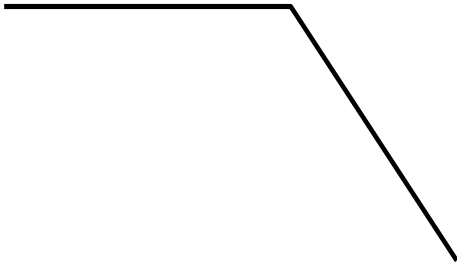
Parameter	Symbol	Limit	Unit		
Maximum repetitive peak reverse voltage	VRRM	0	V		
Maximum average forward rectified current	IF(AV)		A		
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode	IFSM	0	A		
Operating junction and storage temperature range	TJ, TSTG	- 0 to +150	°C		
7 \ S L F D O W K H U P D O U H V L V W D Q F H S H U G B R J C H O R X Q W H G R Q ) 5 3 & C A V					
Instantaneous forward voltage per diode	VF(1)	TYP.	MAX.	V	
		IF=1A TJ=25°C	0. 1		0.76
		IF=1A TJ=125°C	0.		-
		IF=5A 7 - f &	0. 4		0.90
Instantaneous reverse current per diode at rated reverse voltage	IR(2)	TJ=25°C	1	20	uA
		TJ=125°C	2	-	mA

Notes:

(1) Pulse test: 300 μs pulse width, 1 % duty cycle

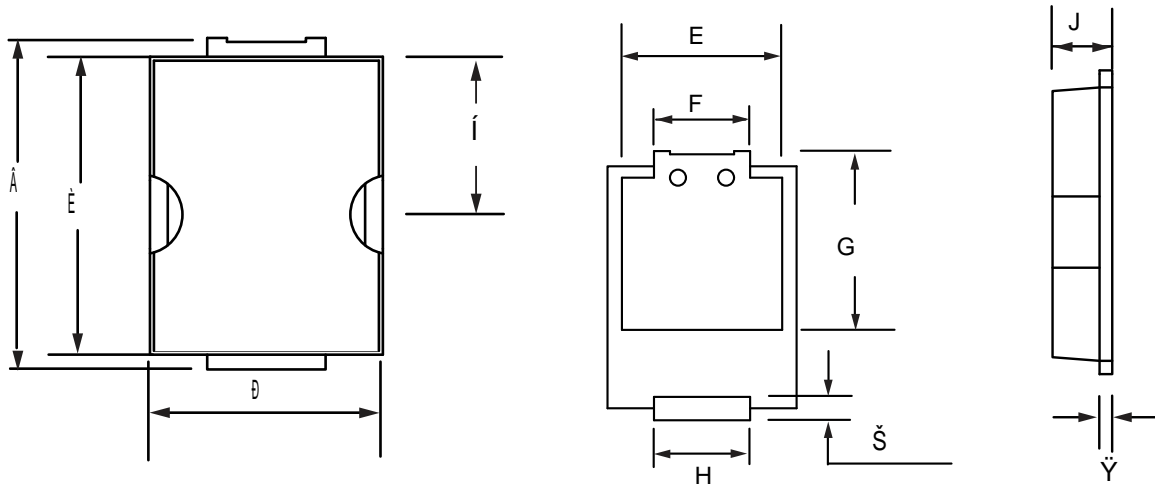
(2) Pulse test: Pulse width 0 40 ms

## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



## PACKAGE OUTLINE DIMENSIONS

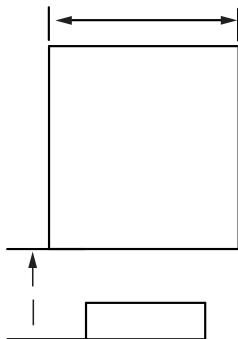
### SMP6



### SMP6 mechanical data

UNIT		A	B	C	D	E	F	G	H	I	J	K
mm	max	8.6	7.75	6.1	4.2	5.2	3.2	5.68	3.2	0.93	1.85	0.45
	min	8.0	7.35	5.7	3.8	4.8	2.8	5.28	2.8	0.53	1.45	0.25
mil	max	338.5	305.1	240.1	165.3	204.7	126.0	223.6	126.0	36.6	72.8	17.7
	min	314.9	289.3	224.4	149.6	188.9	110.2	207.8	110.2	20.8	57.1	9.8

### SMP6 Suggested Pad Layout



UNIT		L	M	N	O	P
mm	min	5*(0	5.78	1.0	3.4	1.8
{ ä}	min	212.6	227.5	39.3	133.8	70.8