Trench MOS Barrier Schottky Rectifier

TSP V SP

TO-277

Cathode —|◀— Anode

Features

- Advanced technology
- Low forward voltage drop
- Low power losses
- High frequency operation
- Lead free Finish / RoHS Compliant

Applications

- DC DC Converters
- AC DC Adaptors
- Switching power supplies
- Freewheeling diodes

Maximum ratings and electrical characteristics @ Ta = 25°C unless otherwise noted

Parameter	Symbol	Limit	Unit
Maximum repetitive peak reverse voltage	VRRM		V
Maximum average forward rectified current	IF(AV)		A
Peak forward surge current single half sine wave superimposed on rated load per diode	IFSM	M	A
Operating junction and storage temperature range	TJ, TSTG	to	°C
Typical thermal resistance per diode (Mounted on FR-4)	RθJL		°C/W

Instantaneous forward voltage per diode:

Condition		Symbol	TYP	MAX	Unit
IF = A	TJ = °C	VF			V
IF = A	TJ = °C				
IF = A	TJ = °C			U	
IF = A	TJ = °C				

Instantaneous reverse current per rated voltage:

Condition	Symbol	Limit	Unit
TJ = °C	IR		µA
TJ = °C	IR	R	mA

Notes

Pulse test: pulse width ... duty cycle

Pulse test: Pulse width ... M

World Interchangeable information

5$7,1*6 $1' &+$5$&7(5,67,&6 &859(6 ƒ& XQOHVV QRWHG RWKHUZLVH

25

20

15

10

5

0

0   25   50   75   100   125   150

Tc, Case Temp (°C)

Reverse Voltage (V)

7 M

7 M

7 M

7 M

7 M

7 M

7 M

2   3   4   5   6   7   8   9

9I   ,QVWDQWDQHRXV)RUZDUG 9ROWDJH 95 P9 5HYHUVH 9ROWDJH 9ROWV

World
Internation
(China) Limited
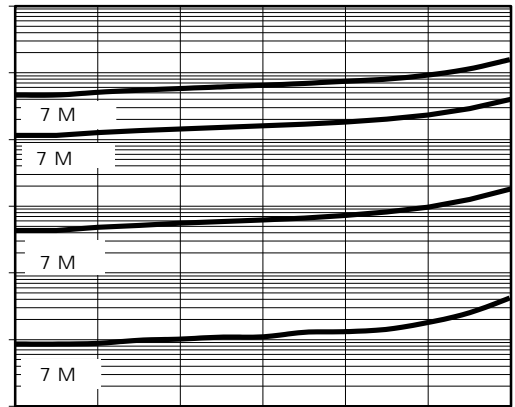
3$&.$*(287/,1(',0(16,216

TO-277

72 **M** D

T			$	E	E	'	'	(	(	(	/	/
P P	P D [											
	P L Q											
P L O	P D [				.							
	P L Q											

72 6XJJHVWHG\RXW

8 1 , 7		&	*	;	;	<	<
P P	P L Q						
P L O	P L Q						

:RUOG ,QW &KULOODWLPLRWV 2HD G

World
Internation
(8...) Limite
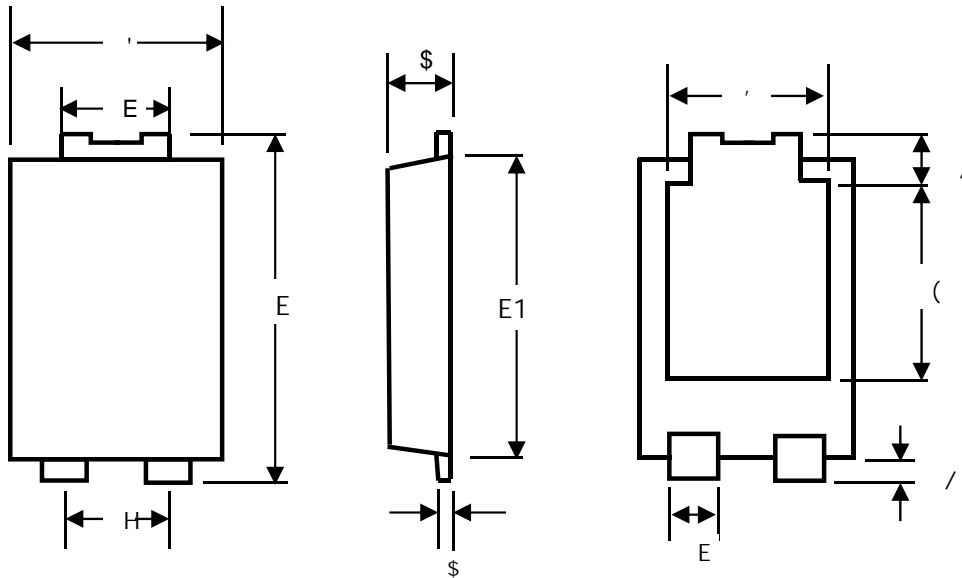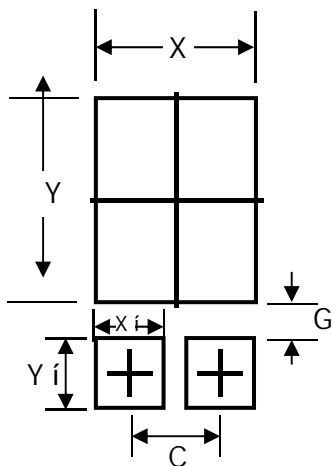
0DUNLQJ ,QIRUPDWLRQ

73URGXFW PRGHO 76IHYJUHG3
WR DV 9

83'& LQIRUPDWLRQ

< ;::

    :: :HHN FRGH WR

    ; ,QWHUQDO LGHQWLILFDWLRQ

    < <HDU FRGH H[

Diagram labels: 9, 7, <;::, 8
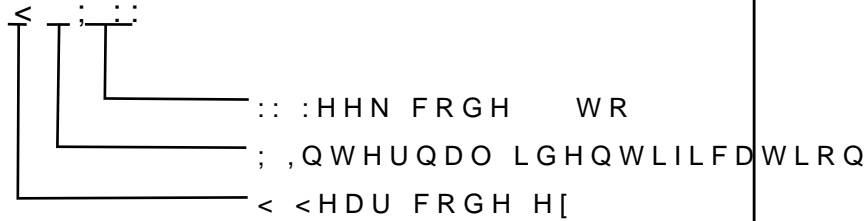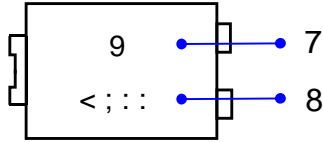
3DFNDJLQJ ,QIRUPDWLRQ

5HHO 'LPHQVLRQV

Labels: 3, $, %
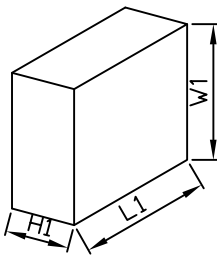
,QVLGH %R[2XWVLGH %R[

Box labels: W1, L1, H1   H2, L2, W2
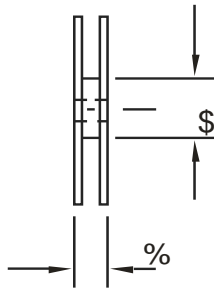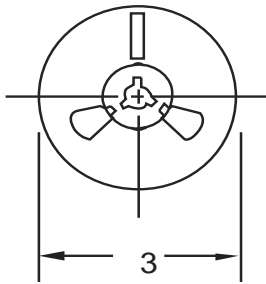
3DFNDJLQJ ,QIRUPDWLRQ

12	81,7	5HHO'LPHQVLRQV			,QVLGH %R[			2XWVLGH %R[		
		&	$	%	/	:	+	/	:	+
6L]H	PP									
47<	3&6	6PDOOHVW SDFNDJH			3&6 UHHO			3&6 UHHO ER[WRWDO		
1RWH		7ROHUDQFH PP"PP			PP"PP			PP"PP		

:RUOG ,QWHUQ FKQLFDO FRPSDQLHG