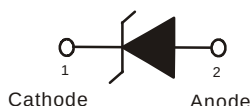
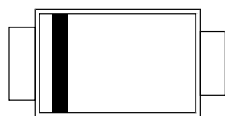


Trench MOS Barrier Schottky Rectifier

TSP3L40FL
SOD-123FL



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_J = 25°C unless otherwise noted)

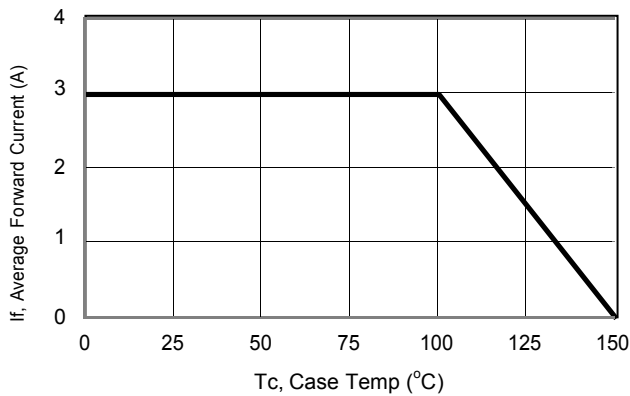
Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	40		V
Maximum average forward rectified current			IF(AV)	3		A
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode			IFSM	55		A
Operating junction and storage temperature range			TJ, TSTG	-50 to +150		°C
Typical thermal resistance per diode (Mounted on FR-4 PCB)			RθJC	22		°C/W
Instantaneous forward voltage			VF(1)	TYP.	MAX.	V
	IF=3A	TJ=25°C		0.39	0.46	
	IF=3A	TJ=25°C		0.32	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	100	500	uA
		TJ=125°C		20	-	mA

Notes:

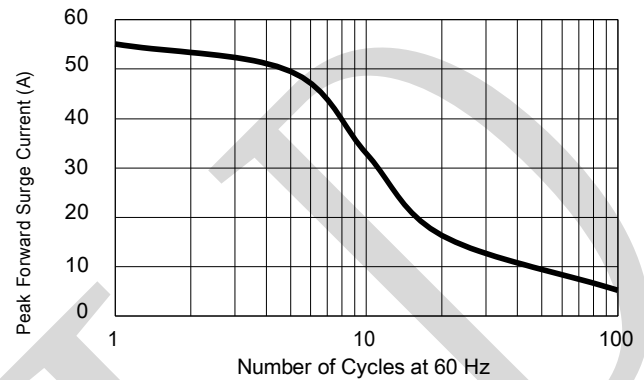
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

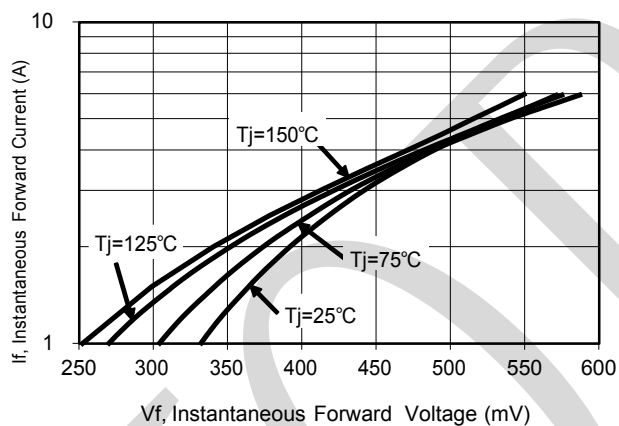
RATINGS AND CHARACTERISTICS CURVES



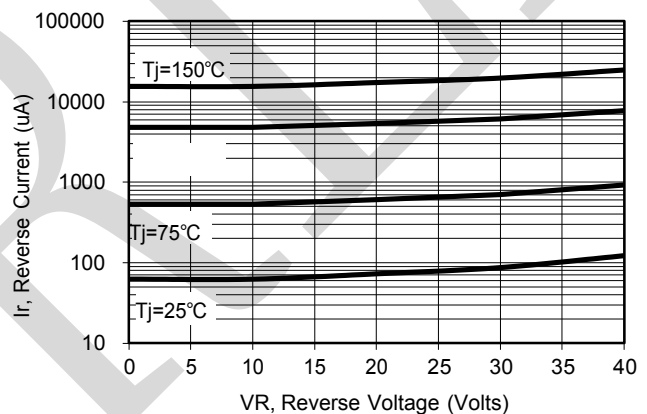
Current Derating, Case



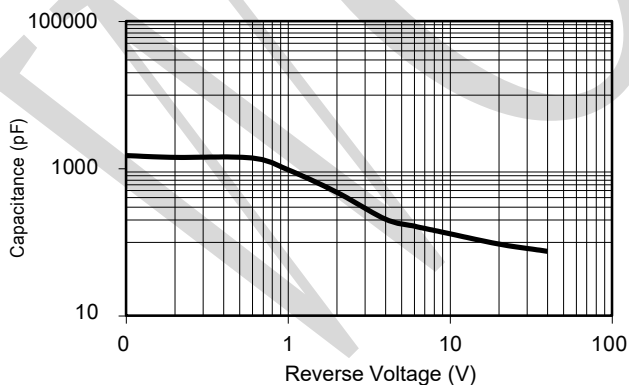
Maximum Repetitive Surge Current



Typical Forward Voltage



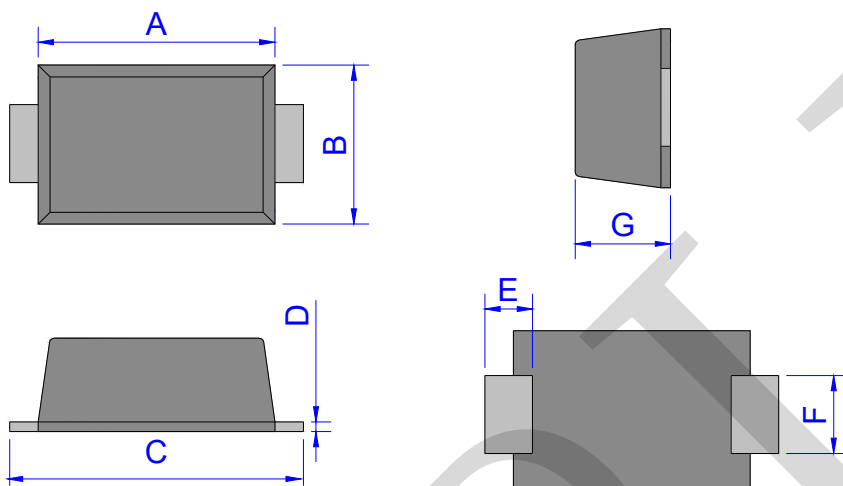
Typical Reverse Current



Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS

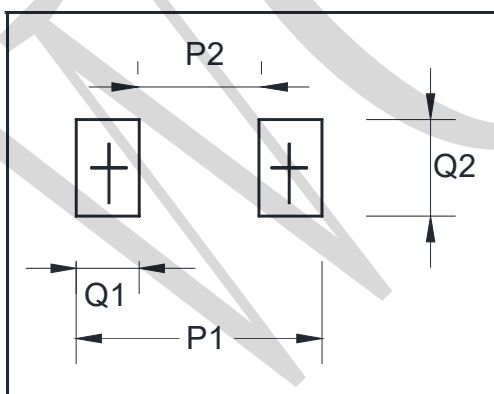
Note:unit mm(mil)



SOD-123FL Mechanical Data

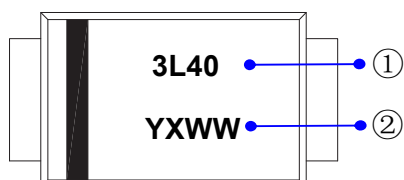
UNIT		A	B	C	D	E	F	G
mm	max	3.0	2.0	3.95	0.25	0.9	1.2	1.35
	min	2.6	1.6	3.45	0.1	0.3	0.7	0.90
mil	max	118.1	78.7	155.5	9.8	35.4	47.2	53.1
	min	102.4	63.0	135.8	3.93	11.8	27.5	35.4

SOD-123FL Suggested Pad Layout



UNIT		P1	P2	Q1	Q2
mm	min	3.9	1.9	1.0	1.05
mil	min	153.5	74.8	39.3	41.3

Marking Information



①Product model : TSP3L40FL is abbreviated to 3L40

②PDC information:

Y X WW

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)