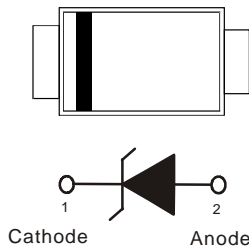


Trench MOS Barrier Schottky Rectifier

Features

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

TSP3L40AF
SMAF



Applications

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

Maximum ratings and electrical characteristics (T_J = 25°C unless otherwise noted)

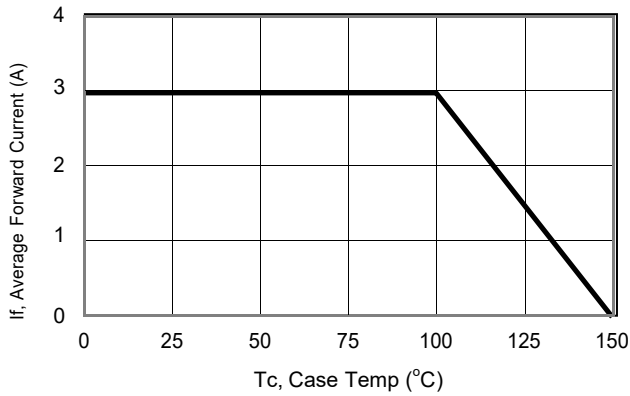
Parameter		Symbol	Limit		Unit
Maximum repetitive peak reverse voltage		VRRM	40		V
Maximum average forward rectified current		IF(AV)	3		A
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode		IFSM	55		A
Operating junction and storage temperature range		TJ, TSTG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

Notes:

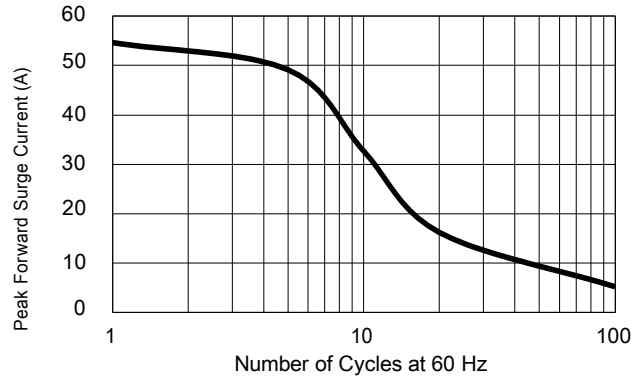
(1) Pulse test: 300 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≦ 40 ms

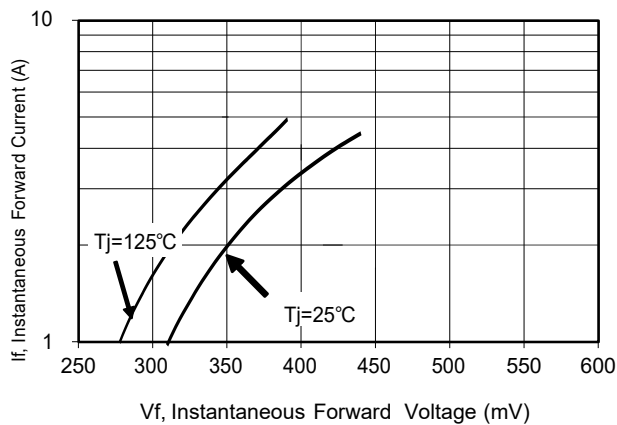
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



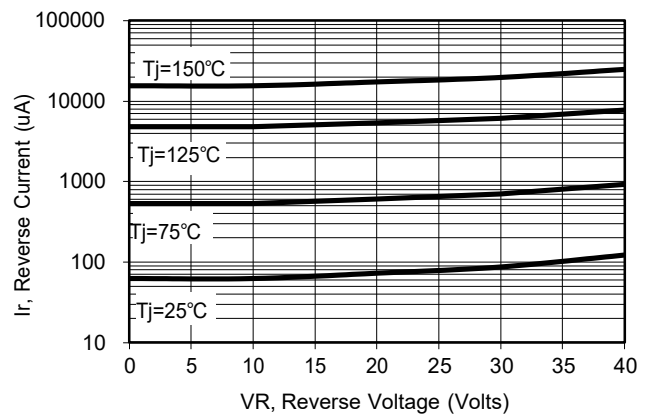
Current Derating, Case



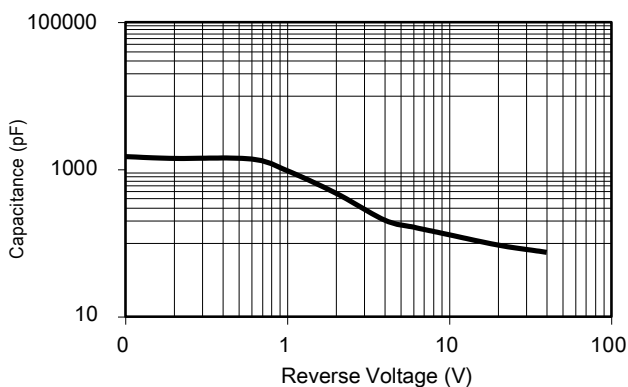
Maximum Repetitive Surge Current



Typical Forward Voltage



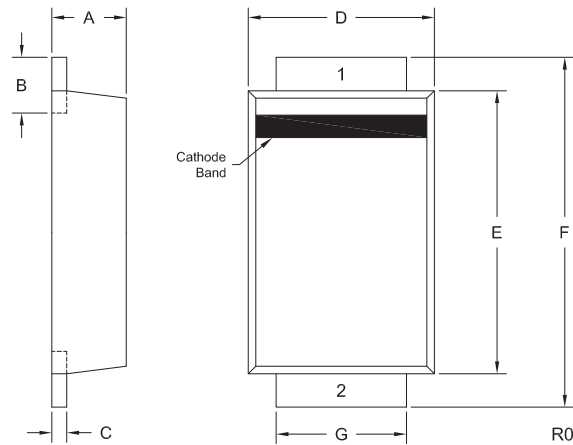
Typical Reverse Current



Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS

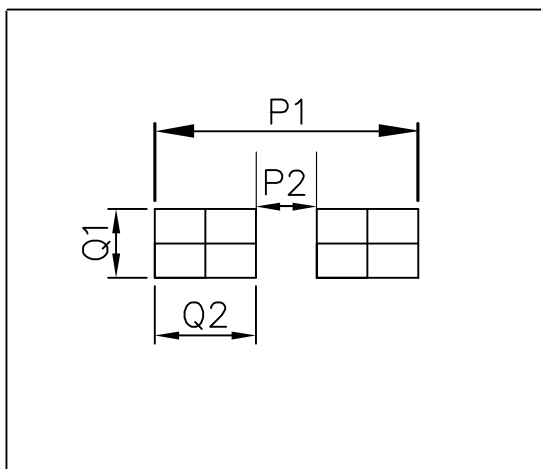
SMAF



SMAF mechanical data

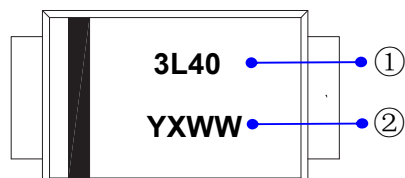
UNIT		A	B	C	D	E	F	G
mm	max	1.10	0.95	0.25	2.8	3.9	4.9	1.65
	min	0.85	0.50	0.11	2.2	3.2	4.2	1.20
mil	max	43.30	37.40	9.84	110.24	153.54	192.91	64.96
	min	33.46	19.68	4.33	86.61	125.98	165.35	47.24

SMAF Suggested Pad Layout



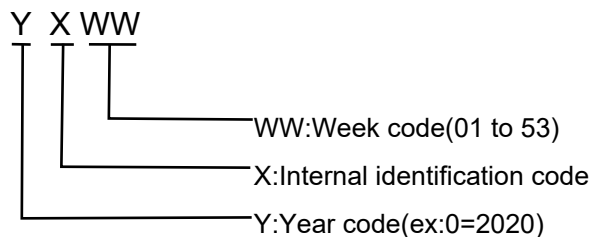
UNIT		P1	P2	Q1	Q2
mm	min	5.10	1.50	1.7	1.8
mil	min	200.8	59.05	67.0	70.87

Marking Information



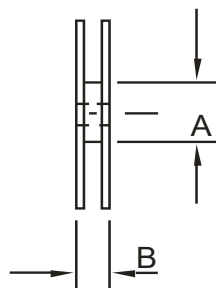
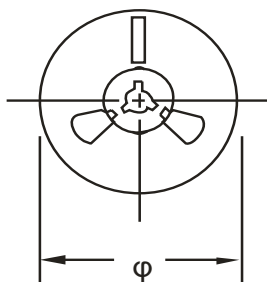
① Product model : TSP3L40AF is abbreviated to 3L40

② PDC information:

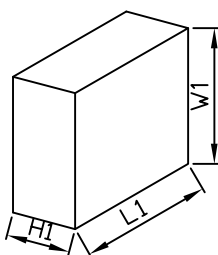


Packaging Information

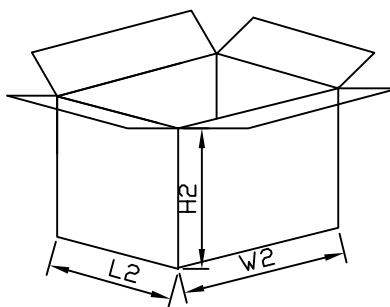
1.Reel Dimensions



2. Inside Box



3. Outside Box



Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
		ϕ	A	B	L1	W1	H1	L2	W2	H2
Size	mm	178	55	11	180	183	120	270	375	235
QTY	PCS	Smallest package,3000PCS/reel			30,000PCS,10reel in total			120,000PCS/carton,4boxes in total		
Note	Tolerance $\leq 20\text{mm}, \pm 3\text{mm};$ 21-100mm, $\pm 5\text{mm};$ 101-500mm, $\pm 10\text{mm}$									