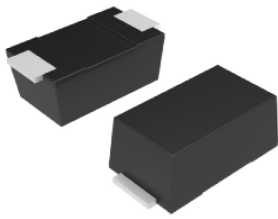


Trench MOS Barrier Schottky Rectifier

TSP3S150AF

SMAF



Cathode  Anode

Features

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

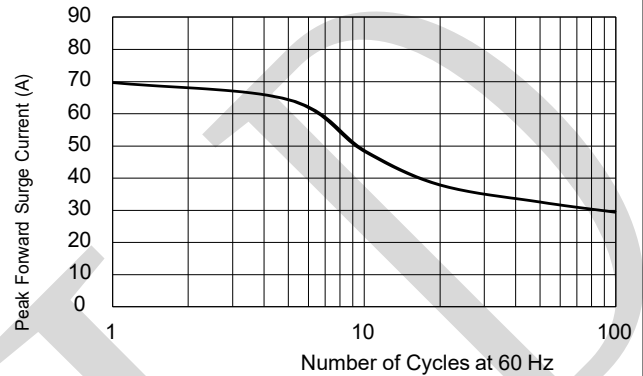
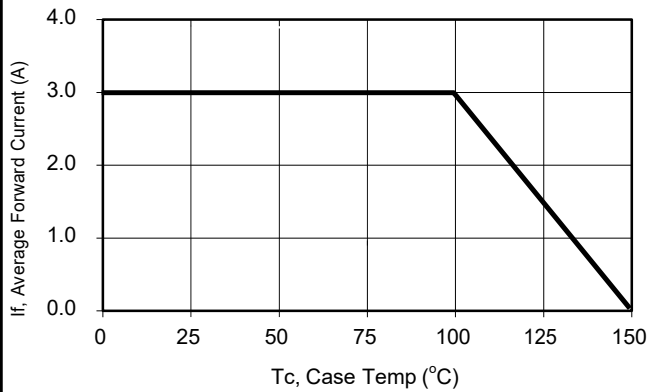
Applications

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

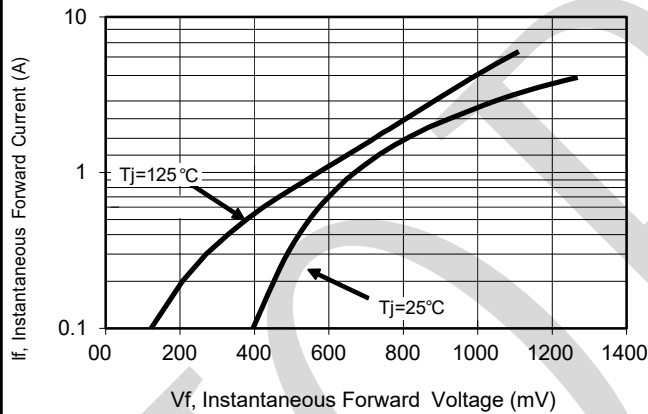
Maximum ratings and electrical characteristics (T_J = 25°C unless otherwise noted)

Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	150		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	70		A
Operating junction and storage temperature range			T _J , T _{STG}	-50 to +150		°C
Typical thermal resistance per diode (Mounted on FR-4 PCB)			R _{θJA}	150		°C/W
Instantaneous forward voltage			V _F	TYP.	MAX.	V
	IF=3A	T _J =25°C		0.78	0.80	
	IF=3A	T _J =125°C		0.75	-	
Instantaneous reverse current per diode at rated reverse voltage		T _J =25°C	I _R	10	50	μA
		T _J =125°C		5	-	mA

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

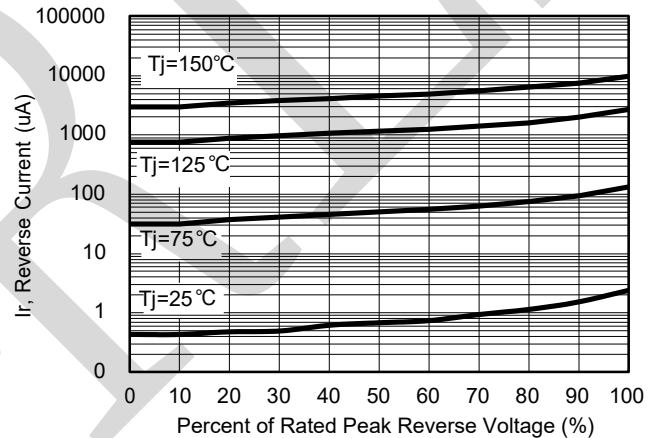


Current Derating, Case



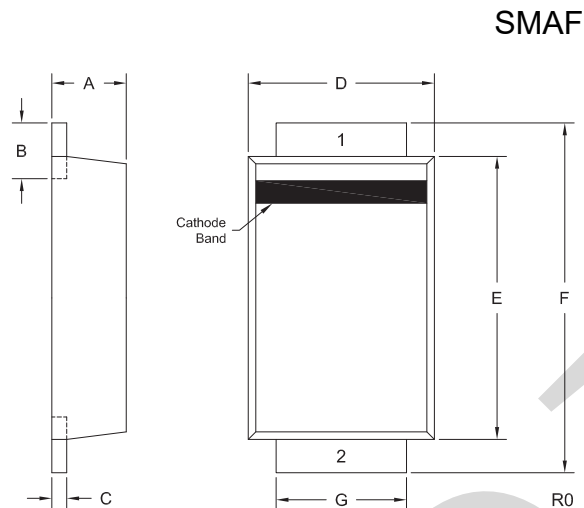
Typical Forward Voltage

Maximum Repetitive Surge Current



Typical Reverse Current

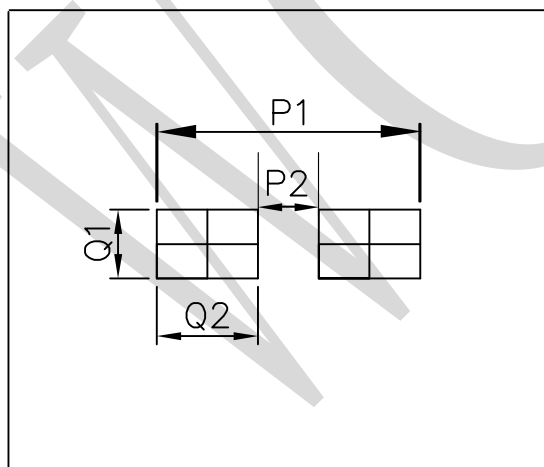
PACKAGE OUTLINE DIMENSIONS



SMAF mechanical data

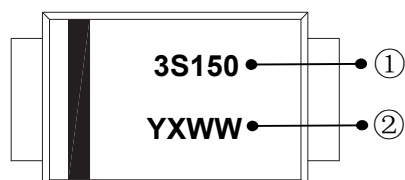
UNIT		A	B	C	D	E	F	G
mm	max	1.10	0.95	0.25	2.8	3.9	4.9	1.65
	min	0.85	0.50	0.11	2.2	3.2	4.2	1.20
mil	max	43.30	37.40	9.84	110.24	153.54	192.91	64.96
	min	33.46	19.68	4.33	86.61	125.98	165.35	47.24

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



①Product model : TSP3S150AF is abbreviated to 3S150

②PDC information:

Y X WW

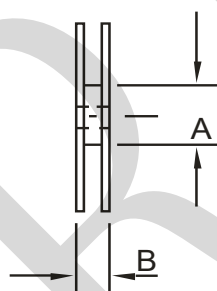
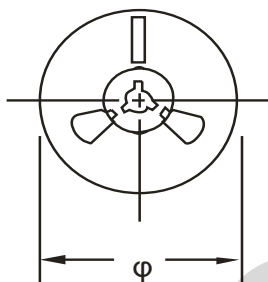
WW:Week code(01 to 53)

X:Internal identification code

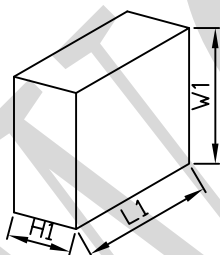
Y:Year code(ex:0=2020)

Packaging Information

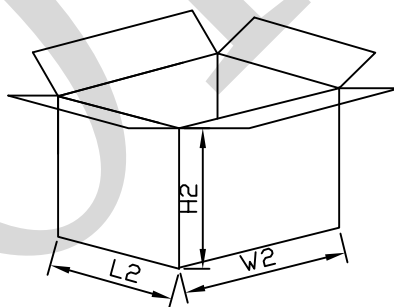
1.Reel Dimensions



2. Inside Box



3. Outside Box



Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
Size	mm	φ	A	B	L1	W1	H1	L2	W2	H2
		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 ≤20mm,±3mm; 21-100mm,±5mm; 101-500mm,±10mm									