

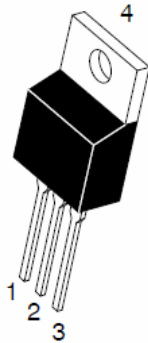
TSR30L45CT-S

TSR30L45CTF-S

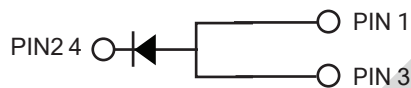
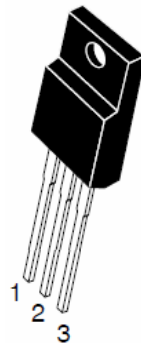
23-NOV-2019

Trench MOS Barrier Schottky Rectifier

TSR30L45CT-S
TO-220AB



TSR30L45CTF-S
TO-220F



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	45		V
Maximum average forward rectified current			IF(AV)	30		A
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode			IFSM	280		A
Operating junction and storage temperature range			TJ, TSTG	-40 to +150		°C
Typical thermal resistance per leg		TO-220AB	RθJC	2		°C/W
		TO-220F		4		°C/W
Instantaneous forward voltage per diode			VF(1)	TYP.	MAX.	V
	IF=3A	TJ=25°C		0.40	0.46	
	IF=3A	TJ=125°C		0.35	-	
	IF=30A	TJ=25°C		0.63	0.68	
	IF=30A	TJ=125°C		0.58	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	50	120	uA
		TJ=125°C		-	30	mA

Notes:

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

(2) Pulse test: Pulse width ≤ 40 ms

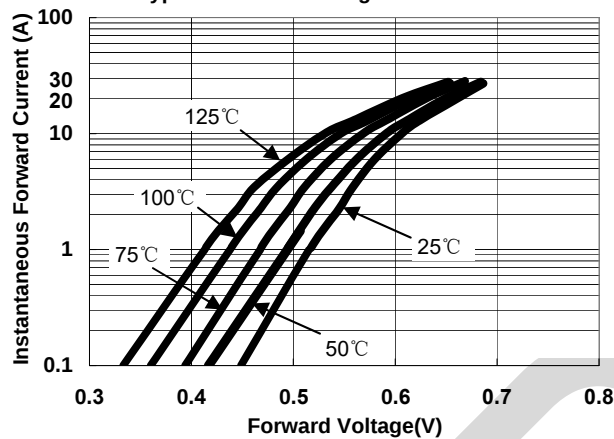
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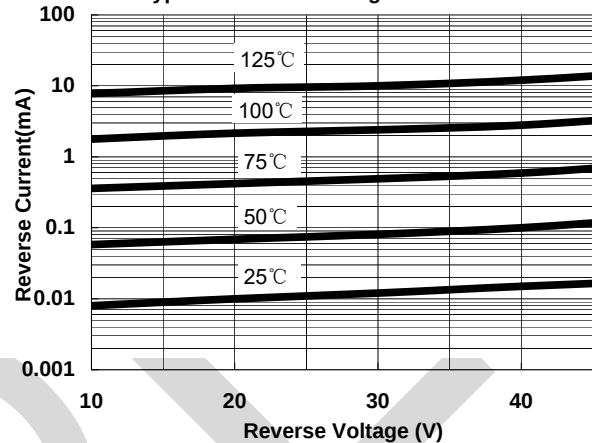
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RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

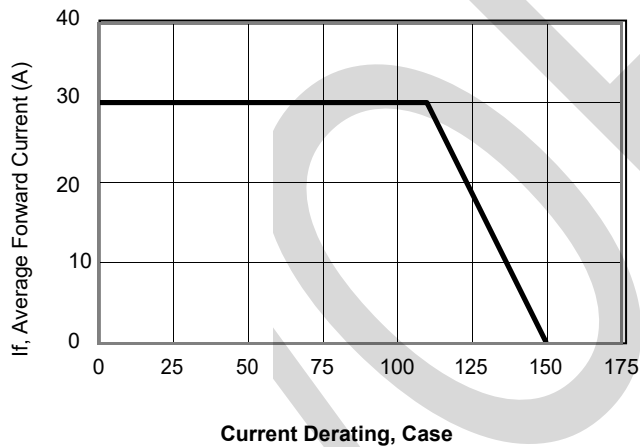
Typical Forward Voltage Characteristics



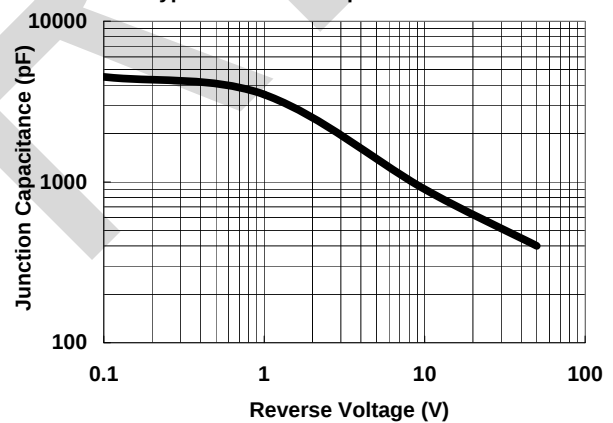
Typical Reverse Leakage Characteristics



Forward Current Derating Curve



Typical Junction Capacitance Per Diode



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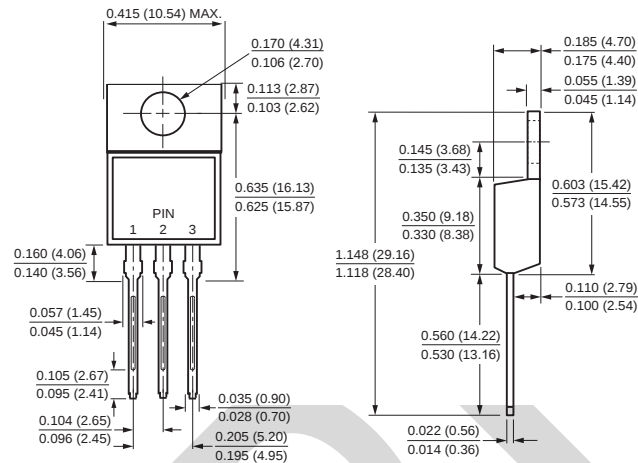
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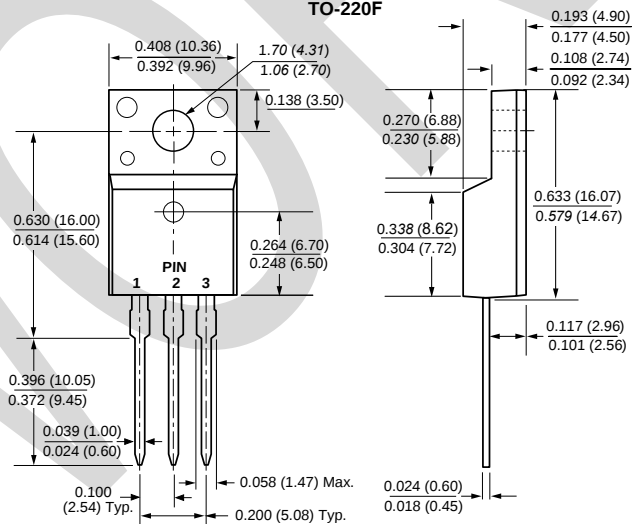
PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

TO-220AB



TO-220F

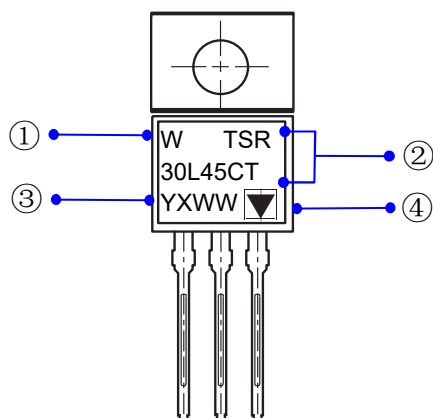


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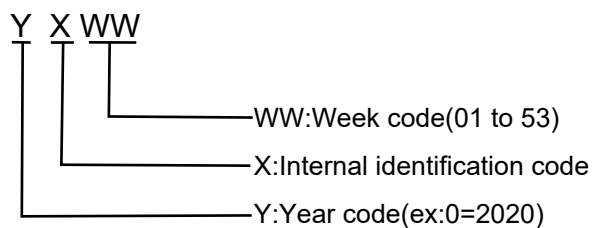
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Marking Information



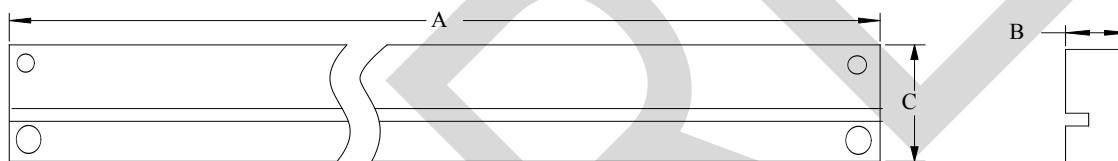
- ①W : Company's trademark
- ②Product model : TSR30L45CT or TSR30L45CTF
- ③PDC information:



- ④  Single wafer

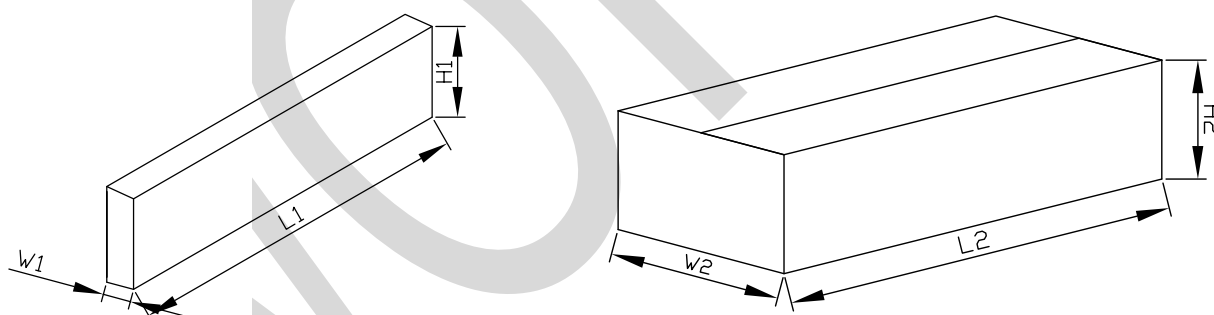
Packaging Information

1. Tube Dimensions



2. Inside Box

3. Outside Box



Packaging Information

NO	UNIT	Tube Dimensions			Inside Box			Outside Box		
Size	mm	A	B	C	L1	W1	H1	L2	W2	H2
		530	7	33	570	46	150	590	260	180
QTY	PCS	50PCS/Tube			Smallest package,1000PCS, 20 tube in total			5,000PCS/carton,5 boxes in total		
Note	Tolerance ≤20mm,±3mm; 21-100mm,±5mm; 101-500mm,±10mm									