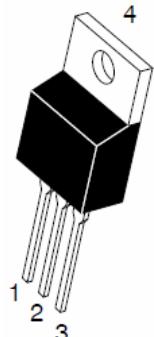
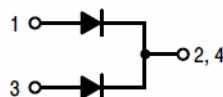
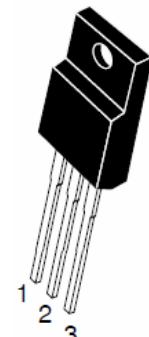


Trench MOS Barrier Schottky Rectifier

TO-220AB
TSR30L120CT



ITO-220AB
TSR30L120CTF



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 ($T_J = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Limit		Unit
Maximum repetitive peak reverse voltage	VRRM	120		V
Maximum average forward rectified current	device	IF(AV)	30	A
	per diode		15	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode	IFSM	220		A
Operating junction and storage temperature range	TJ, TSTG	-50 to +150		°C
Typical thermal resistance per leg	TO-220AB	R _{θJC}	2	°C/W
	ITO-220AB		4	°C/W
Instantaneous forward voltage per diode		VF(1)	TYP.	MAX.
	IF=3A TJ=25°C		0.47	0.53
	IF=3A TJ=125°C		0.42	-
	IF=15A TJ=25°C		0.75	0.80
	IF=15A TJ=125°C		0.70	-
Instantaneous reverse current per diode at rated reverse voltage	TJ=25°C	IR(2)	20	50
	TJ=125°C		2	-
				uA
				mA

Notes:

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

(2) Pulse test: Pulse width ≤ 40 ms

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25^\circ\text{C}$ unless otherwise noted)

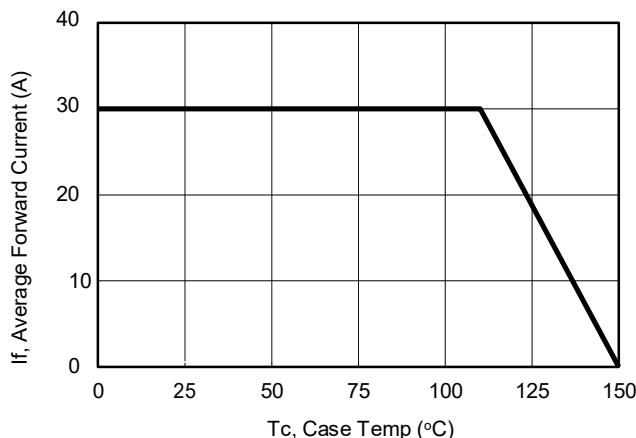


Figure 1: Current Derating, Case

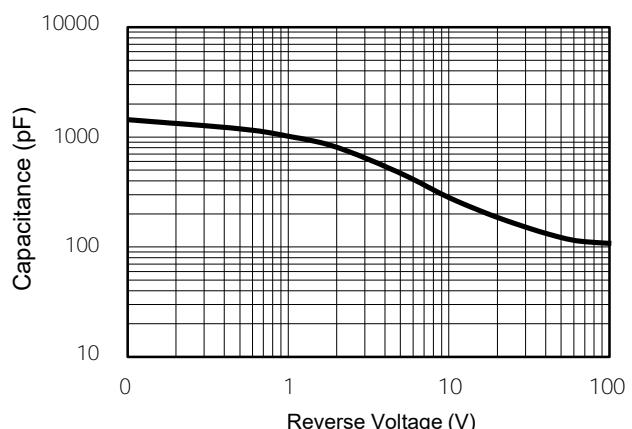


Figure 2: Typical Junction Capacitance

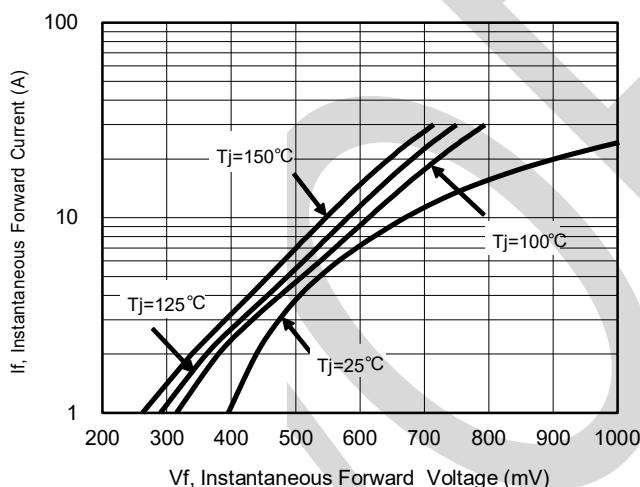


Figure 3: Typical Forward Voltage

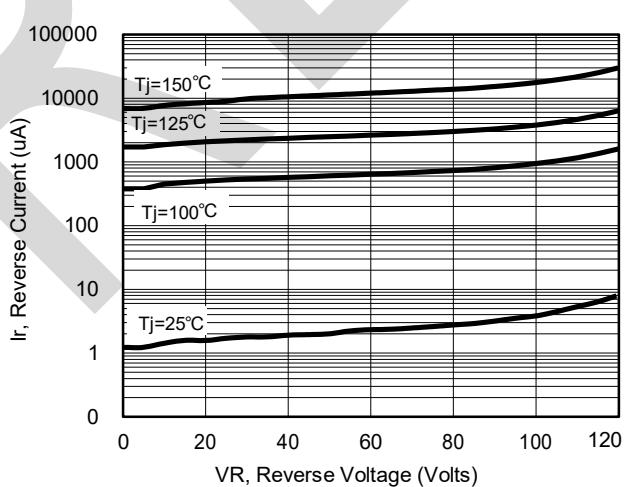


Figure 4: Typical Reverse Current



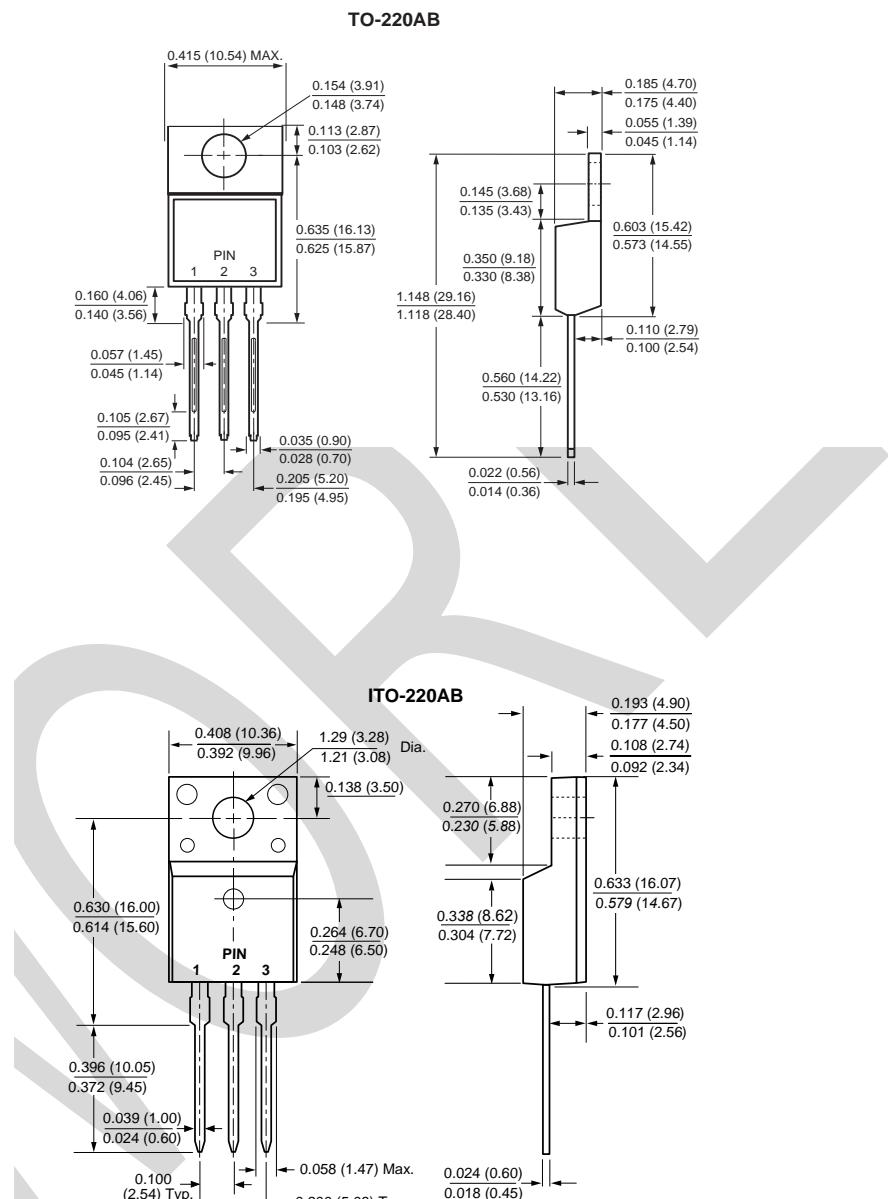
TSR30L120CT

TSR30L120CTF

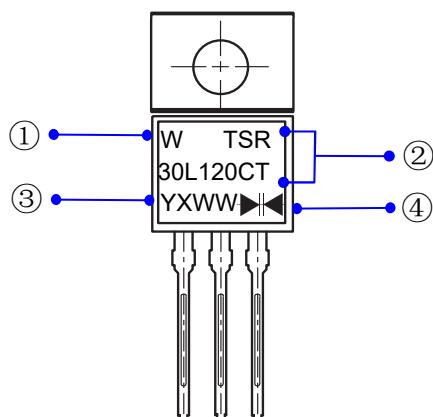
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PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)



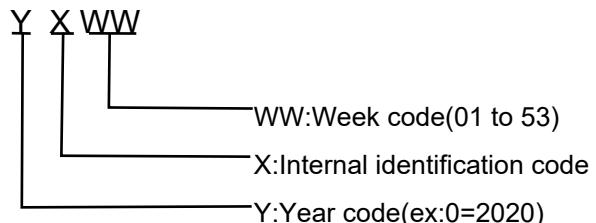
Marking Information



① W : Company's trademark

② Product model : TSR30L120CT or TSR30L120CTF

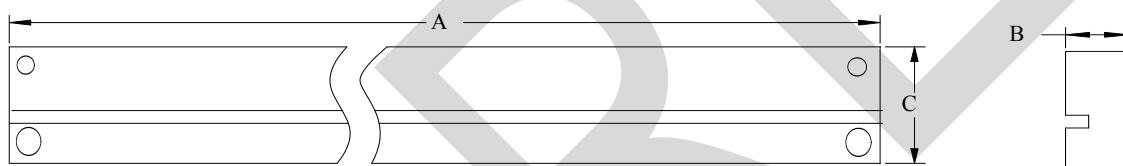
③ PDC information :



④ ►► Double wafer

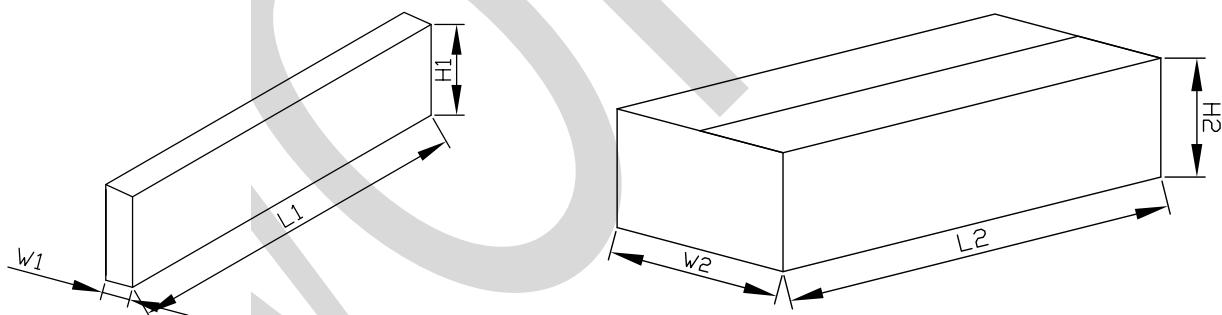
Packaging Information

1.Tube Dimensions



2.Inside Box

3.Outside Box



Packaging Information

NO	UNIT	Tube Dimensions			Inside Box			Outside Box		
		A	B	C	L1	W1	H1	L2	W2	H2
Size	mm	530	7	33	570	46	150	590	260	180
		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			