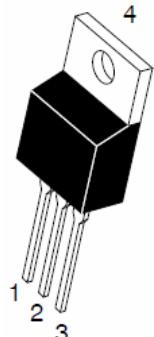
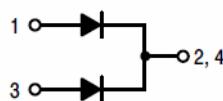
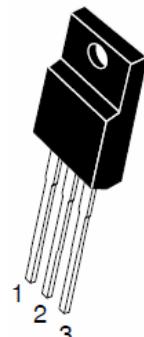


## Trench MOS Barrier Schottky Rectifier

**TSR20L300CT**  
**TO-220AB**



**TSR20L300CTF**  
**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 (TJ = 25°C unless otherwise noted)

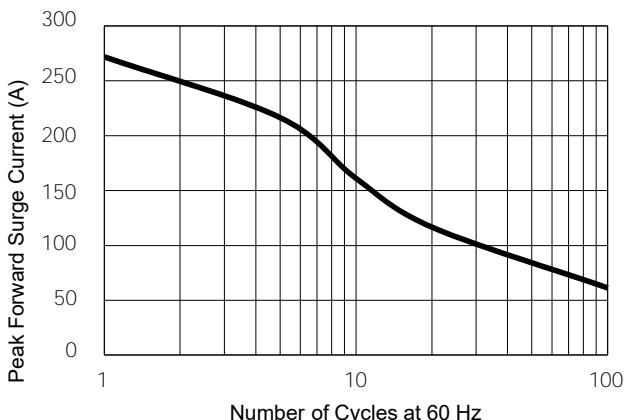
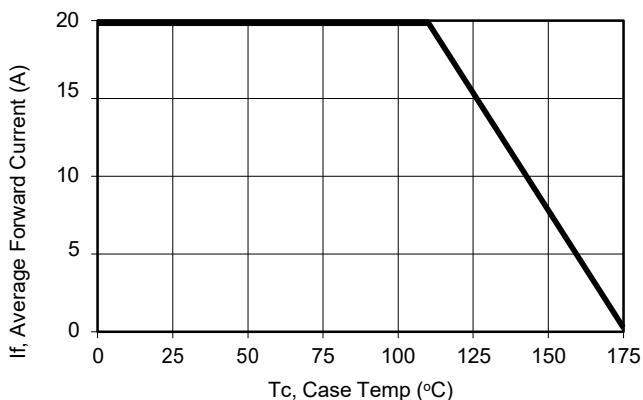
Parameter	Symbol	Limit		Unit
Maximum repetitive peak reverse voltage	VRRM	300		V
Maximum average forward rectified current	device	IF(AV)	20	A
	per diode		10	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode	IFSM	280		A
Operating junction and storage temperature range	TJ, TSTG	-50 to +175		°C
Typical thermal resistance per leg	TO-220AB	R <sub>θJC</sub>	2	°C/W
	ITO-220AB		4	°C/W
Instantaneous forward voltage per diode		VF(1)	TYP.	MAX.
	IF=3A TJ=25°C		0.72	0.78
	IF=3A TJ=125°C		0.66	-
	IF=10A TJ=25°C		0.82	0.86
	IF=10A TJ=125°C		0.75	-
Instantaneous reverse current per diode at rated reverse voltage	TJ=25°C	IR(2)	1	50 uA
	TJ=125°C		1	- mA

Notes:

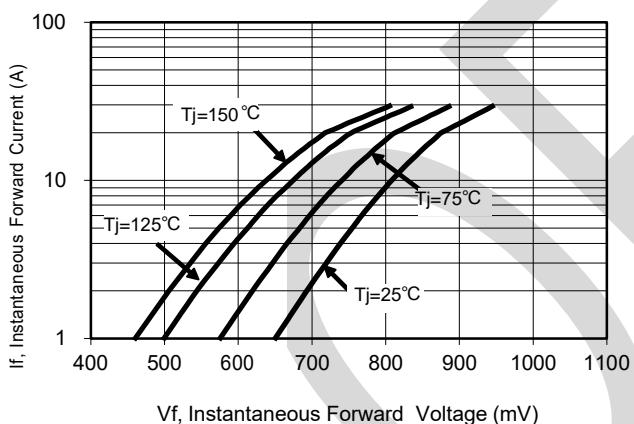
(1) Pulse test: 300 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

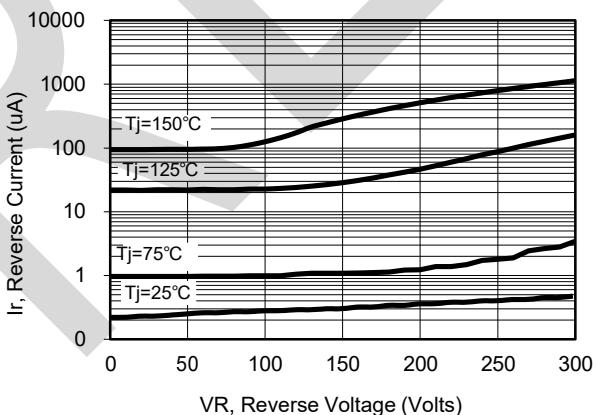
## RATINGS AND CHARACTERISTICS CURVES ( $T_A = 25^\circ\text{C}$ unless otherwise noted)



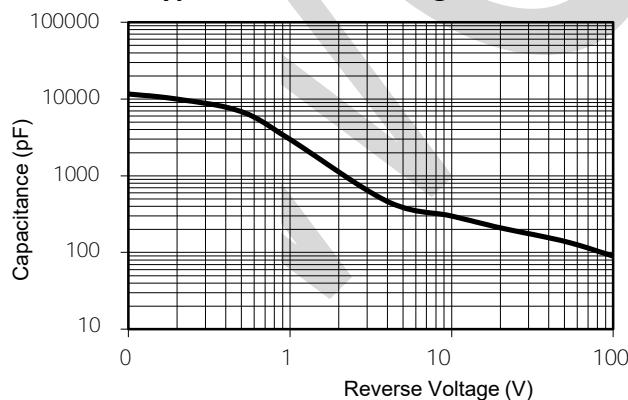
**Current Derating, Case**



**Maximum Repetitive Surge Current**



**Typical Forward Voltage**

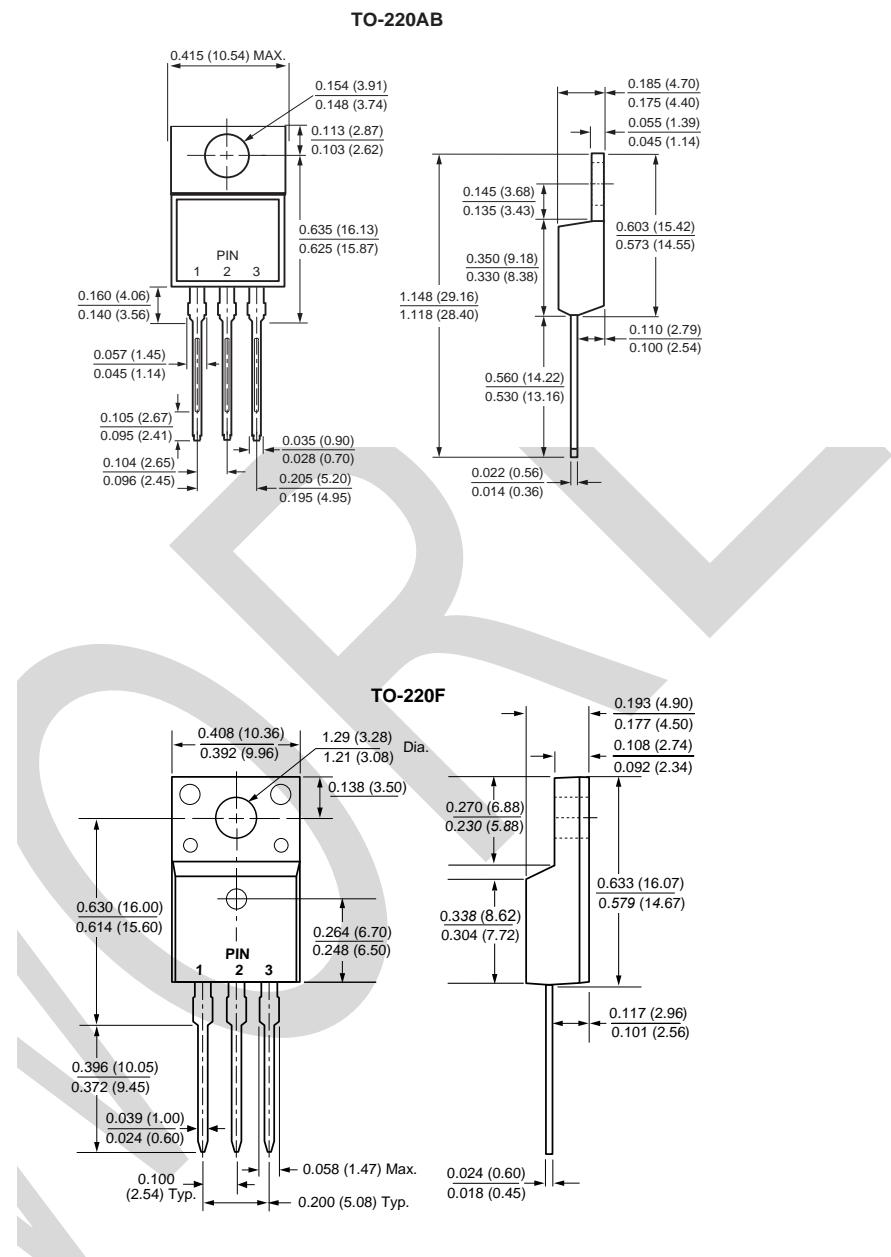


**Typical Reverse Current**

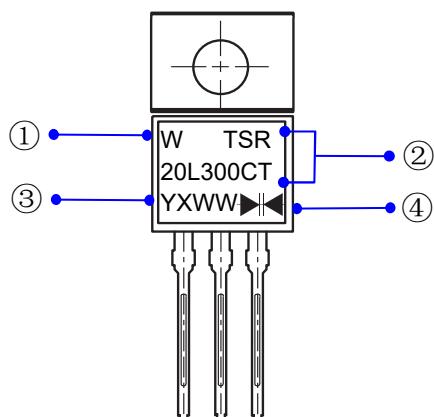
**Typical Junction Capacitance**

## PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)



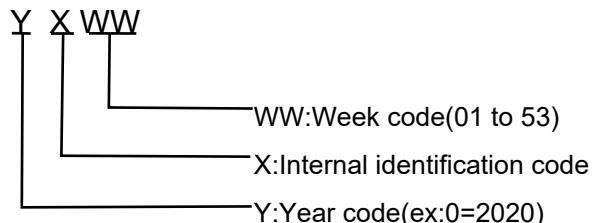
## Marking Information



①W : Company's trademark

②Product model : TSR20L300CT or TSR20L300CTF

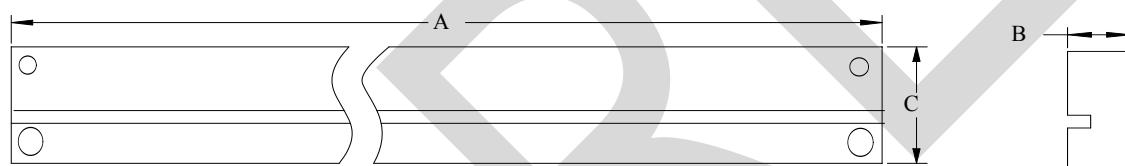
③PDC information:



④ ►◀ Double wafer

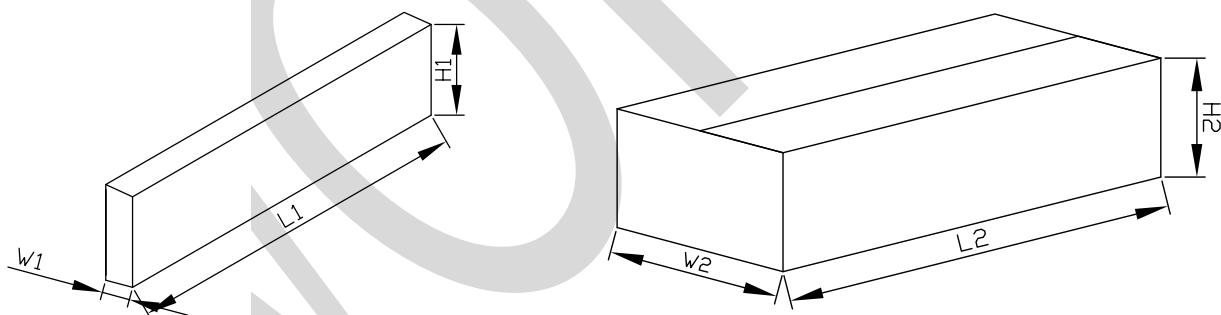
## Packaging Information

### 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			