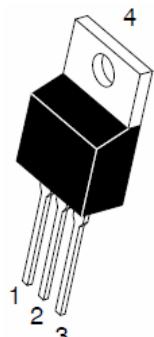
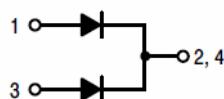
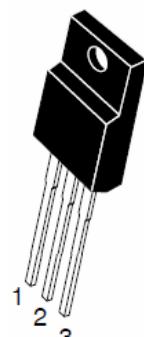


## Trench MOS Barrier Schottky Rectifier

**TO-220AB**  
**TSR20S100CT**



**ITO-220AB**  
**TSR20S100CTF**



### 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)

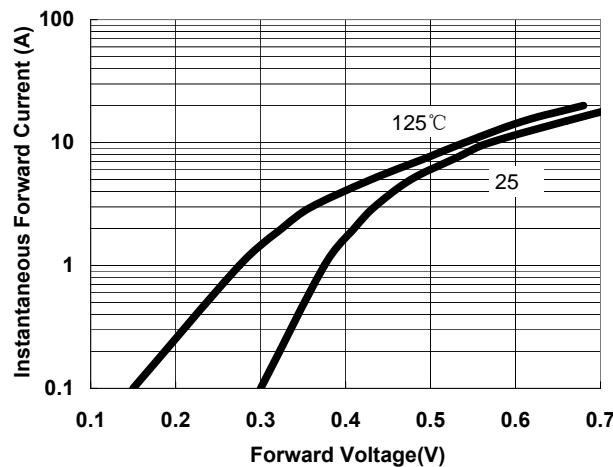
Parameter	Symbol	Limit		Unit
Maximum repetitive peak reverse voltage	VRRM	100		V
Maximum average forward rectified current	device	IF(AV)	20	A
	per diode		10	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode	IFSM	230		A
Operating junction and storage temperature range	TJ, TSTG	-50 to +150		°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=5A TJ=25°C		0.50	0.56
	IF=5A TJ=125°C		0.43	-
	IF=10A TJ=25°C		0.62	0.68
	IF=10A TJ=125°C		0.54	-
				V
Instantaneous reverse current per diode at rated reverse voltage	TJ=25°C	IR(2)	20	70
	TJ=125°C		-	20 mA

Notes:

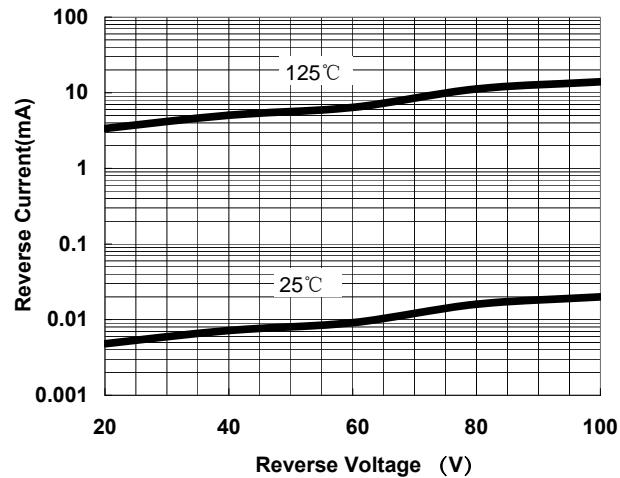
(1) Pulse test: 300 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

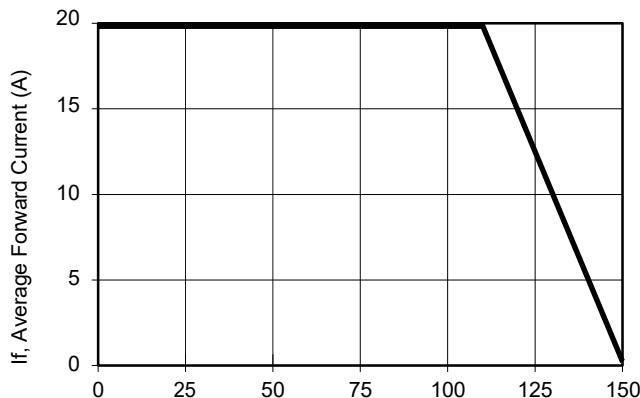
## RATINGS AND CHARACTERISTICS CURVES ( $T_A = 25^\circ\text{C}$ unless otherwise noted)



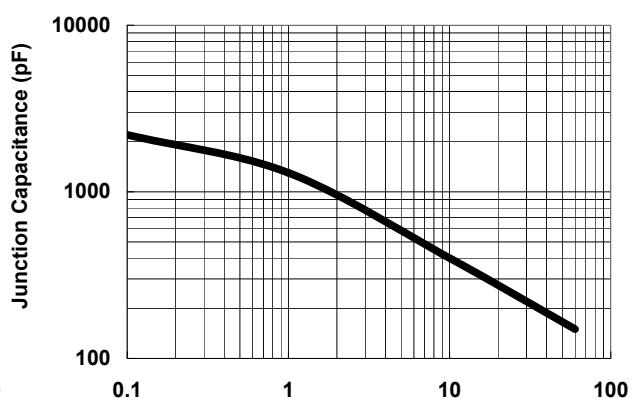
Forward Current Derating Curve



Typical Junction Capacitance Per Diode



Current Derating, Case

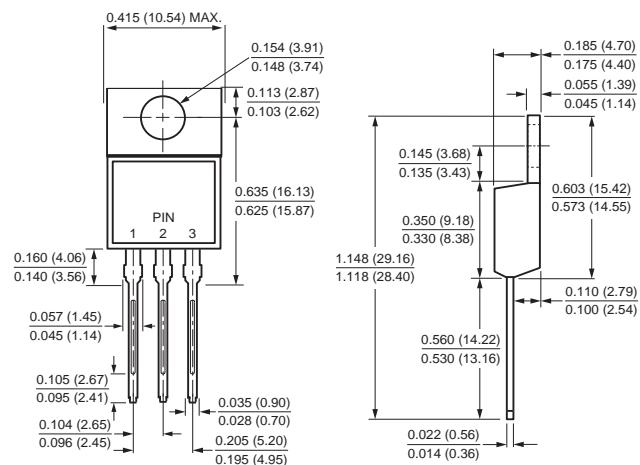


Reverse Voltage (V)

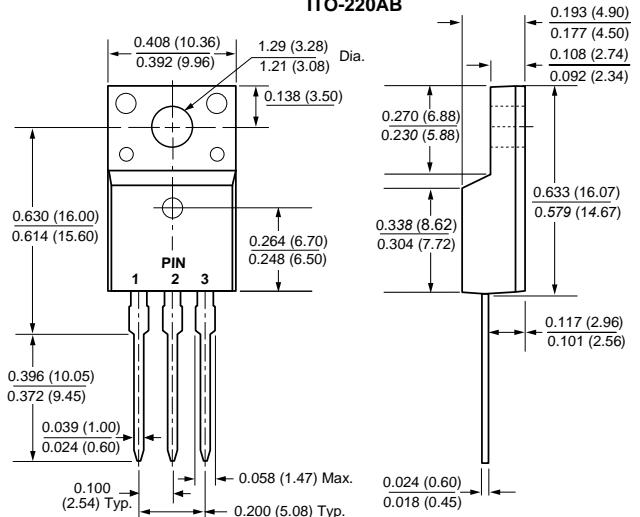
## PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

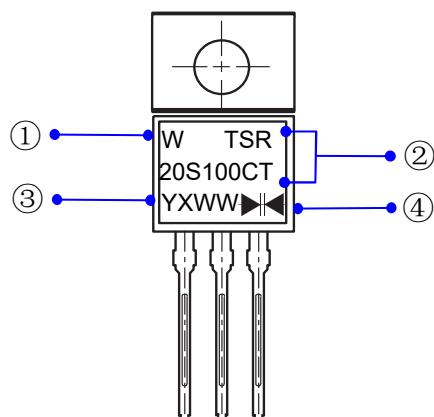
TO-220AB



ITO-220AB



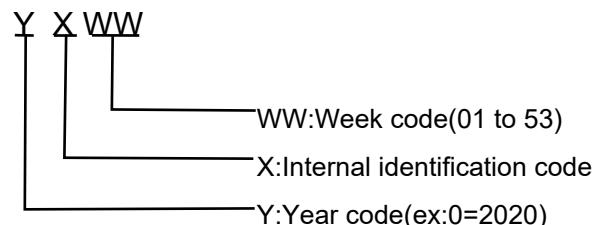
## Marking Information



① W : Company's trademark

② Product model : TSR20S100CT or TSR20S100CTF

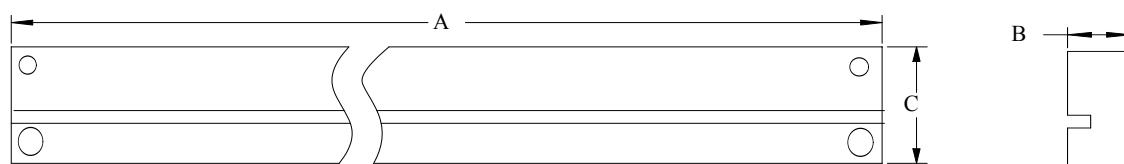
③ PDC information:



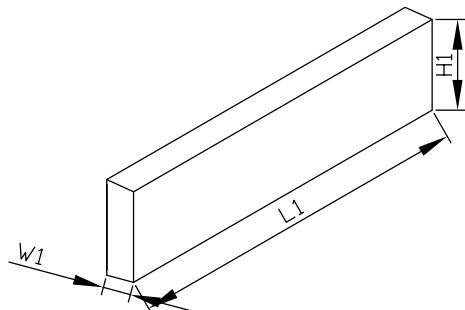
④ ►► Double wafer

## Packaging Information

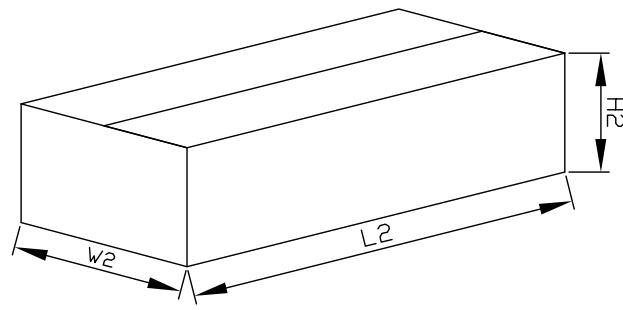
### 1.Tube Dimensions



### 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 $\leq 20\text{mm}, \pm 3\text{mm};$			$21-100\text{mm}, \pm 5\text{mm};$			$101-500\text{mm}, \pm 10\text{mm}$			