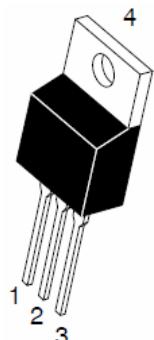
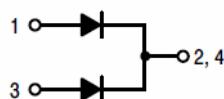
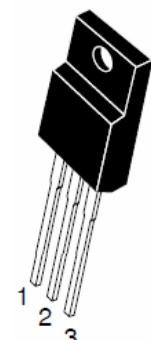


## Trench MOS Barrier Schottky Rectifier

**TO-220AB**  
**TSR40L200CT**



**ITO-220AB**  
**TSR40L200CTF**



### 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	200		V
Maximum average forward rectified current	device	IF(AV)	40	A
	per diode		20	
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 <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		0.69	0.75
	IF=5A TJ=125°C		0.63	-
	IF=20A TJ=25°C		0.81	0.87
	IF=20A TJ=125°C		0.73	-
Instantaneous reverse current per diode at rated reverse voltage	TJ=25°C	IR(2)	2	50 uA
	TJ=125°C		2	- 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)

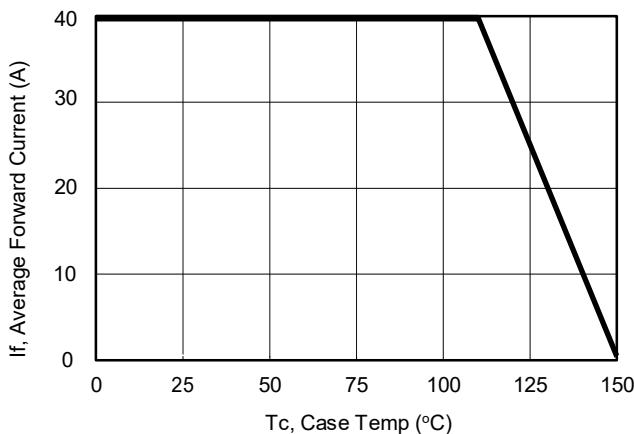


Figure 1: Current Derating, Case

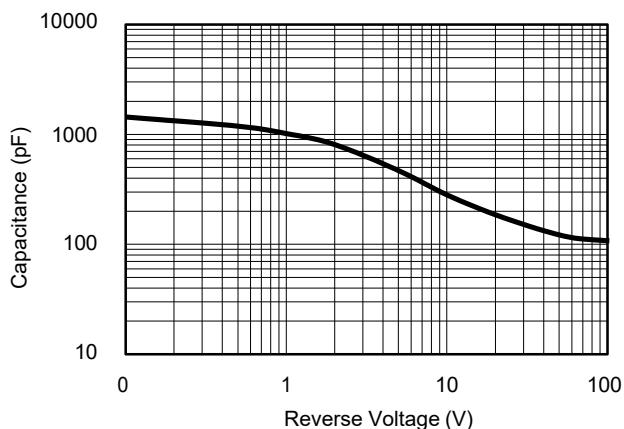


Figure 2: Typical Junction Capacitance

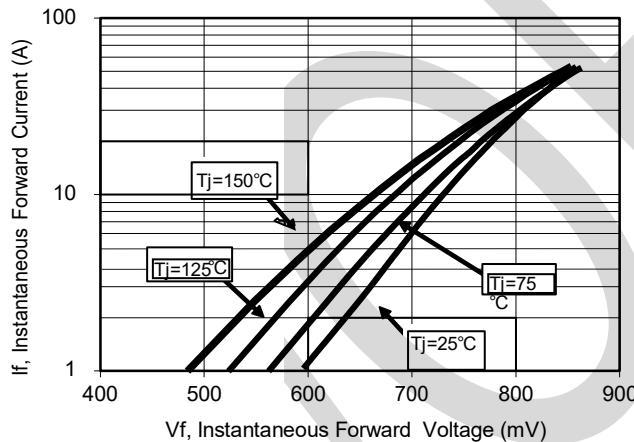


Figure 3: Typical Forward Voltage

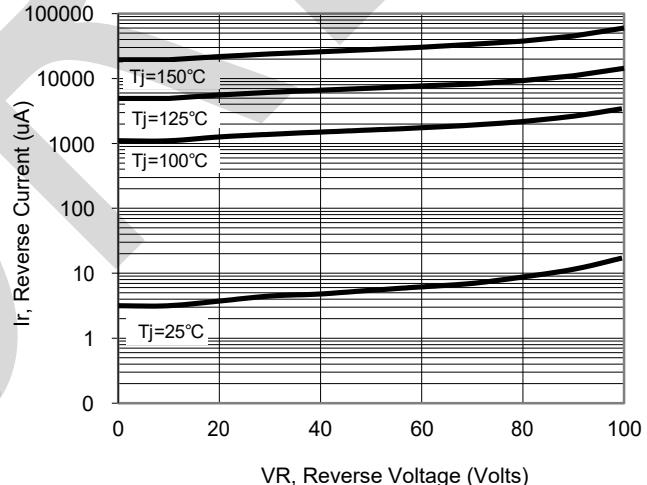
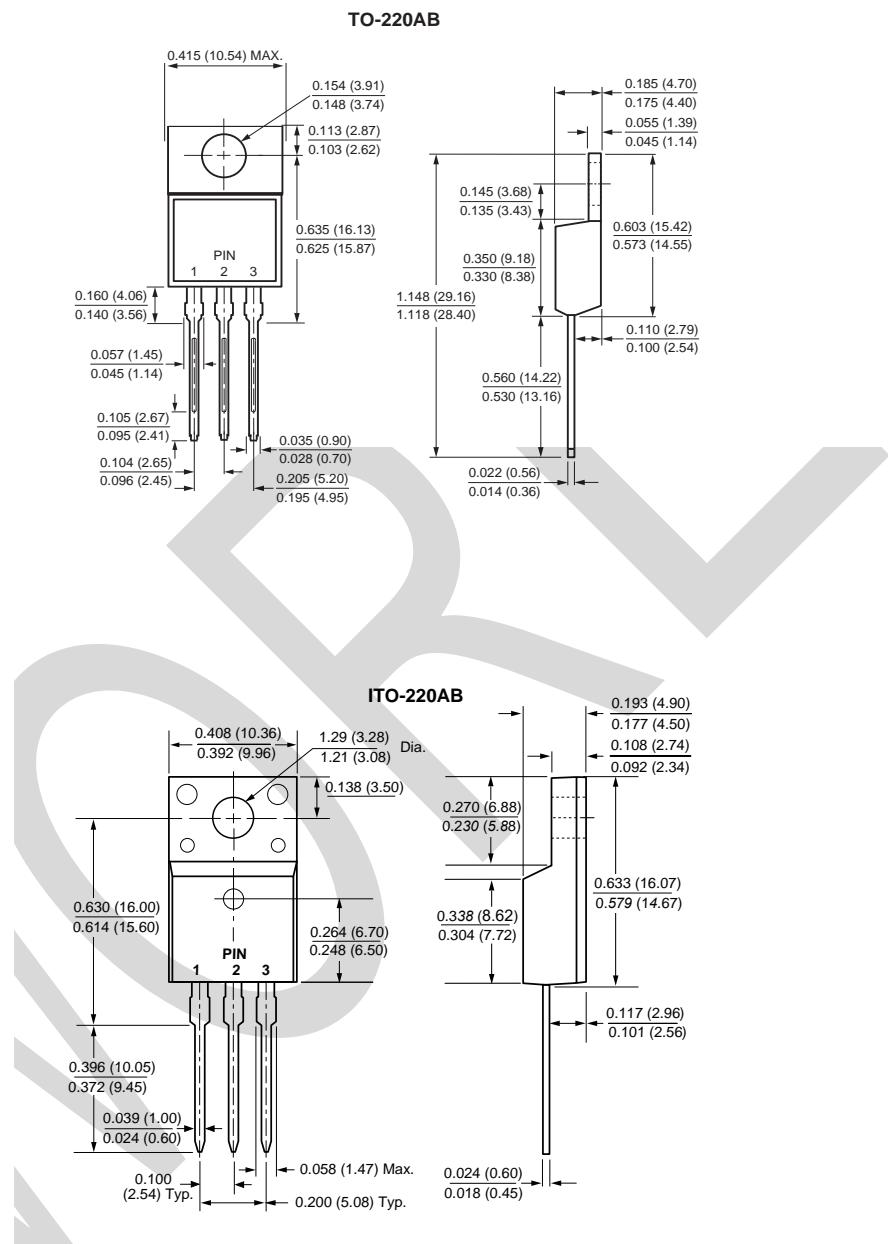


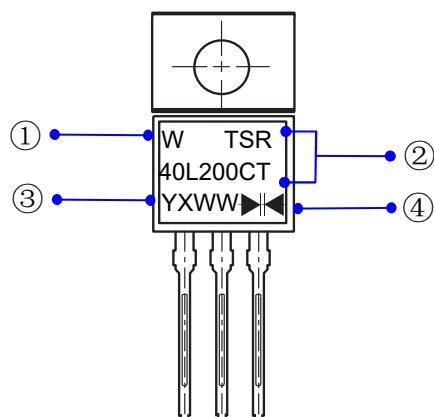
Figure 4: Typical Reverse Current

## PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)



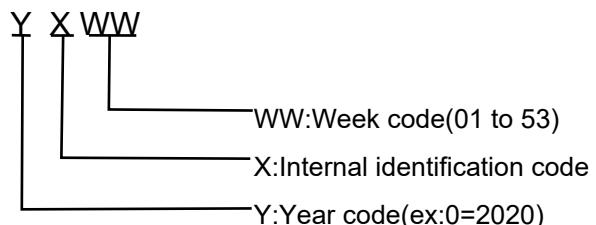
## Marking Information



① W : Company's trademark

② Product model : TSR40L200CT or TSR40L200CTF

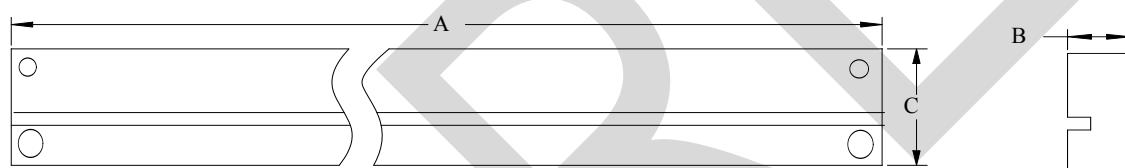
③ PDC information :



④ ►► Double wafer

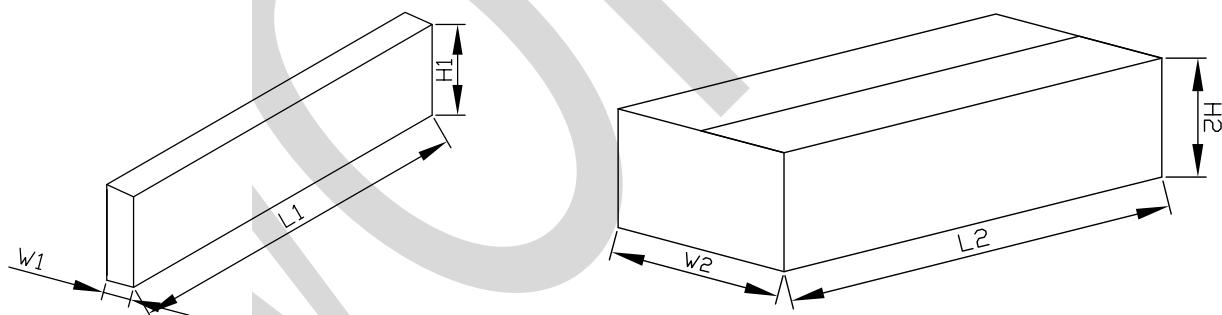
## Packaging Information

### 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									