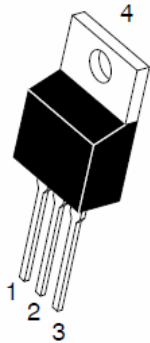
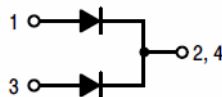
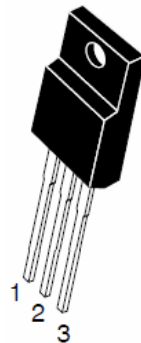


## Trench MOS Barrier Schottky Rectifier

**TO-220AB**  
**TSR40A100CT**



**ITO-220AB**  
**TSR40A100CTF**



### 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<sub>J</sub> = 25°C unless otherwise noted)

Parameter		Symbol	Limit		Unit
Maximum repetitive peak reverse voltage		VRRM	100		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	RθJC	2		°C/W
	ITO-220AB		4		°C/W
Instantaneous forward voltage per diode			TYP.	MAX.	V
	IF=3A	TJ=25°C	0.47	0.55	
	IF=3A	TJ=125°C	0.42	-	
	IF=10A	TJ=25°C	0.70	0.78	
Instantaneous reverse current per diode at rated reverse voltage					
		TJ=25°C	20	60	µA
		TJ=125°C	-	50	mA

Notes:

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

(2) Pulse test: Pulse width ≤ 40 ms

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

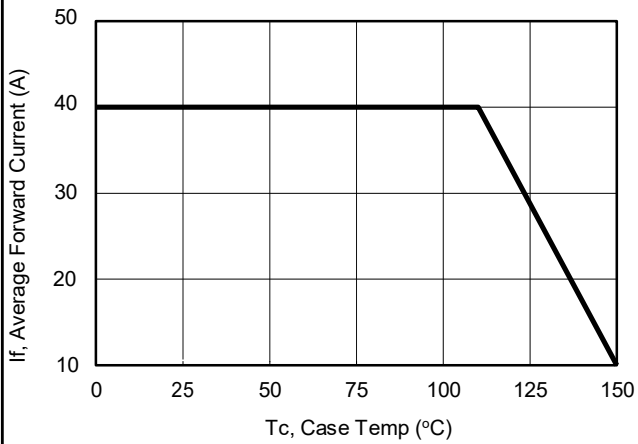


Figure 1: Current Derating, Case

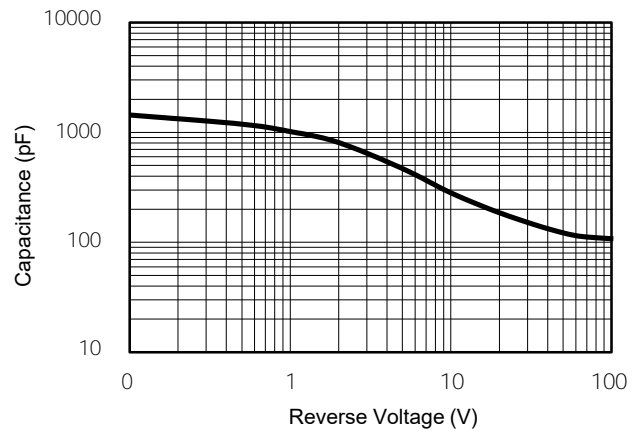


Figure 2: Typical Junction Capacitance

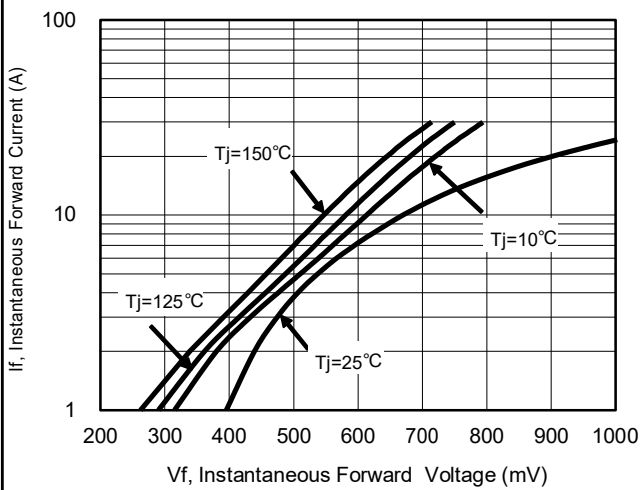


Figure 3: Typical Forward Voltage

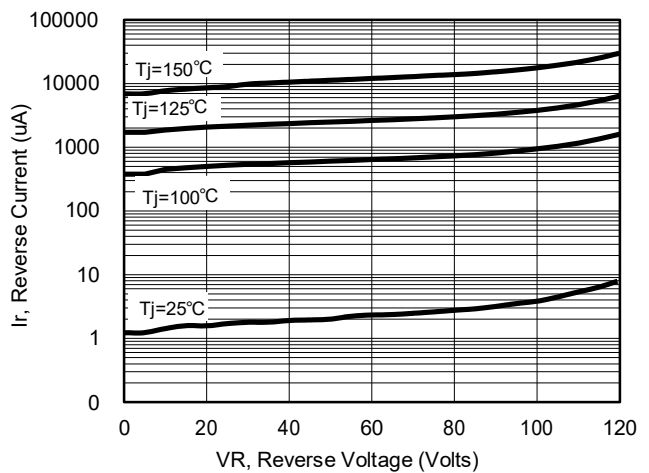
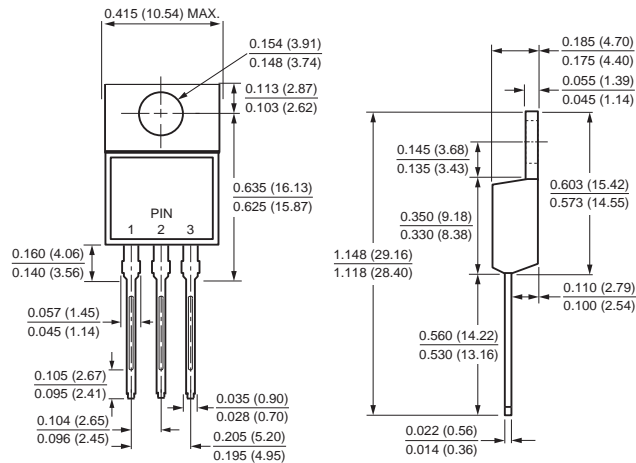


Figure 4: Typical Reverse Current

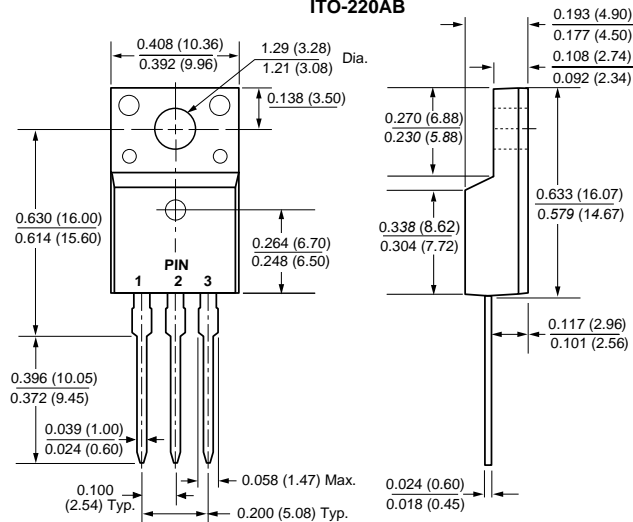
## PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

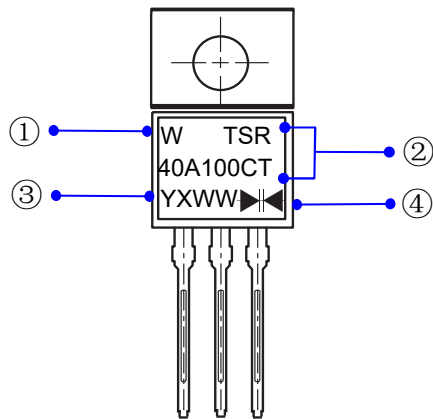
TO-220AB



ITO-220AB

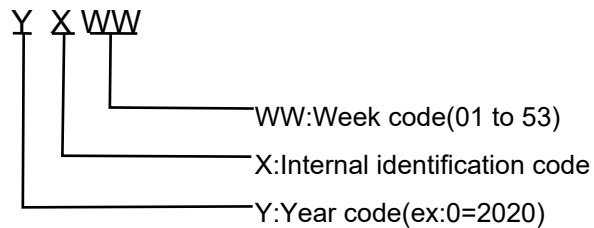


## Marking Information



①W : Company's trademark  
②Product model : TSR40A100CT or TSR40A100CTF

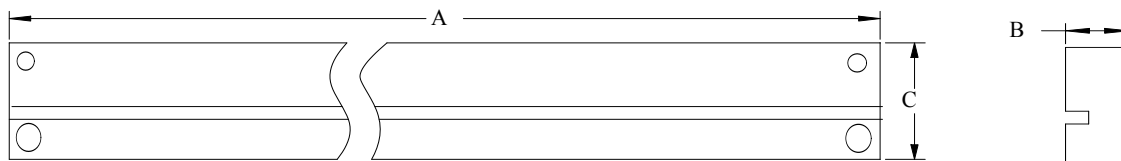
③PDC information:



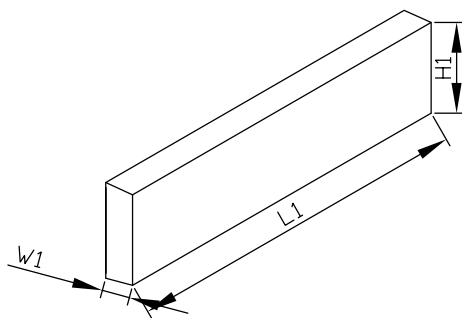
④  Double wafer

## Packaging Information

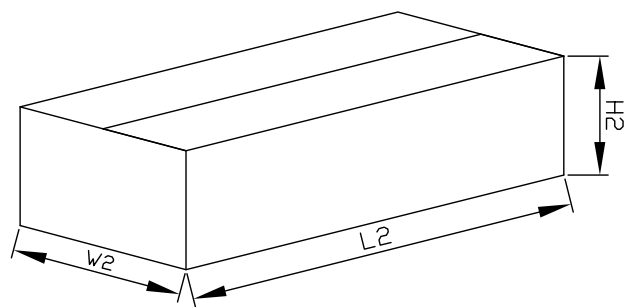
### 1.Tube Dimensions



### 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
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									