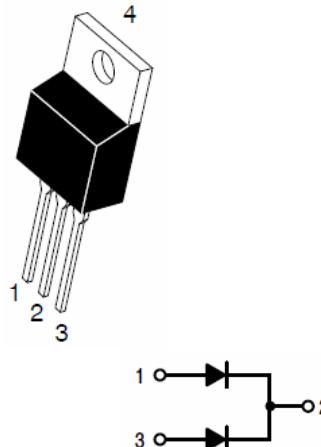
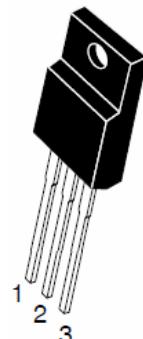


## Trench MOS Barrier Schottky Rectifier

**TO-220AB**  
**TSR40S150CT**



**ITO-220AB**  
**TSR40S150CTF**



### 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)

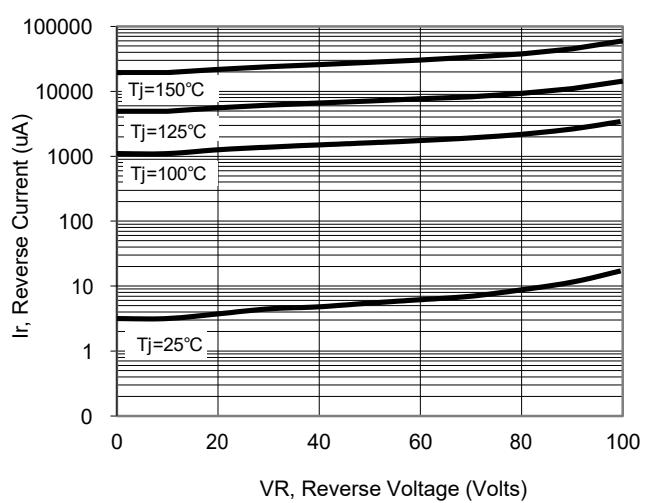
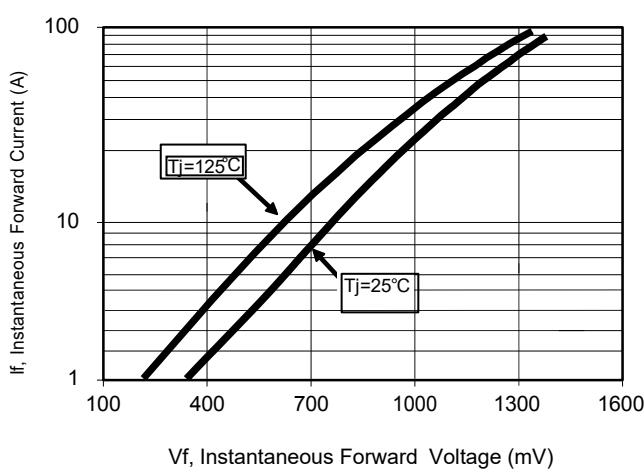
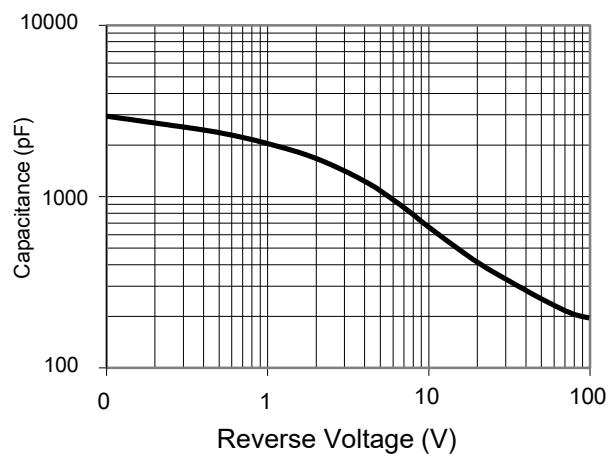
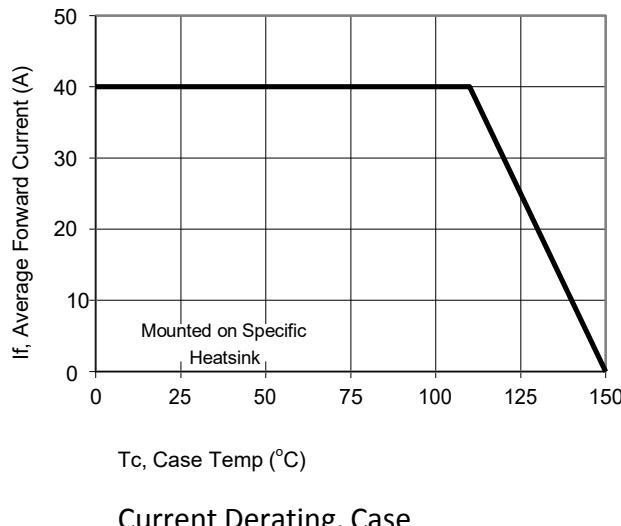
Parameter	Symbol	Limit		Unit
Maximum repetitive peak reverse voltage	VRRM	150		V
Maximum average forward rectified current	device	IF(AV)	40	A
	per diode		20	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode	IFSM	250		A
Operating junction and storage temperature range	$T_J$ , TSTG	-65 to +150		$^\circ\text{C}$
Typical thermal resistance per leg	TO-220AB	R $\theta$ J <sub>C</sub>	2	$^\circ\text{C}/\text{W}$
	ITO-220AB		4	$^\circ\text{C}/\text{W}$
Instantaneous forward voltage per diode		VF(1)	TYP.	MAX.
	IF=2A $T_J=25^\circ\text{C}$		0.43	0.48
	IF=2A $T_J=125^\circ\text{C}$		0.38	-
	IF=10A $T_J=25^\circ\text{C}$		0.73	0.79
	IF=10A $T_J=125^\circ\text{C}$		0.68	-
Instantaneous reverse current per diode at rated reverse voltage	$T_J=25^\circ\text{C}$	IR(2)	10	uA
	$T_J=125^\circ\text{C}$		-	mA

Notes:

(1) Pulse test: 300  $\mu\text{s}$  pulse width, 1 % duty cycle

(2) Pulse test: Pulse width  $\leq 40$  ms

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





# TSR40S150CT

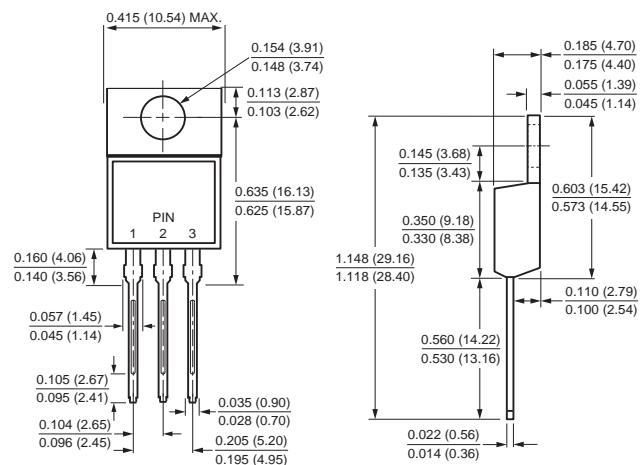
# TSR40S150CTF

23-NOV-2017

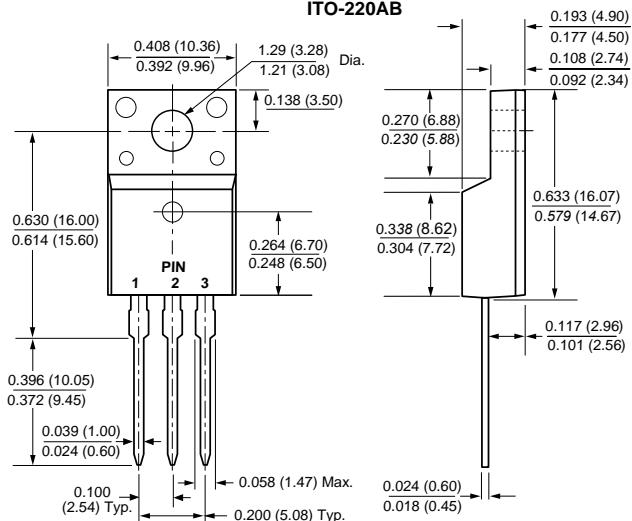
## PACKAGE OUTLINE DIMENSIONS

Note: unit In(mm)

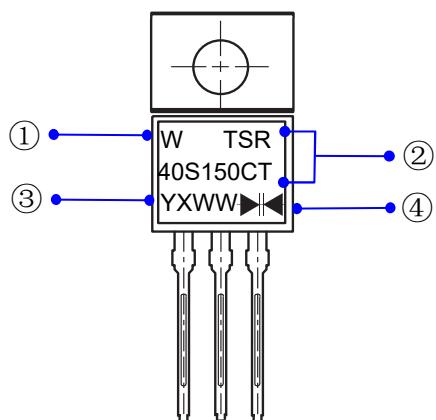
TO-220AB



ITO-220AB



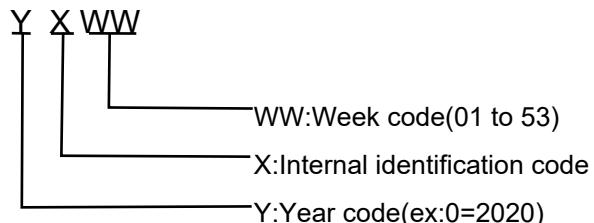
## Marking Information



①W : Company's trademark

②Product model : TSR40S150CT or TSR40S150CTF

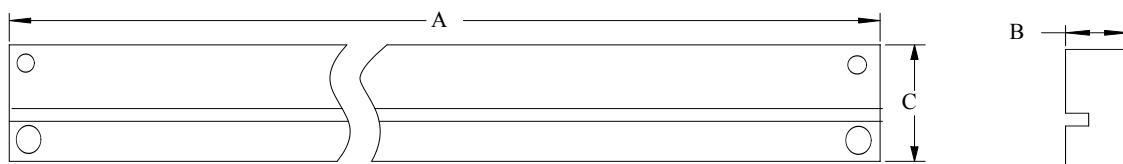
③PDC information:



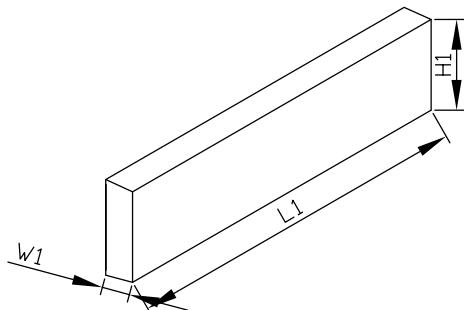
④ ►► Double wafer

## Packaging Information

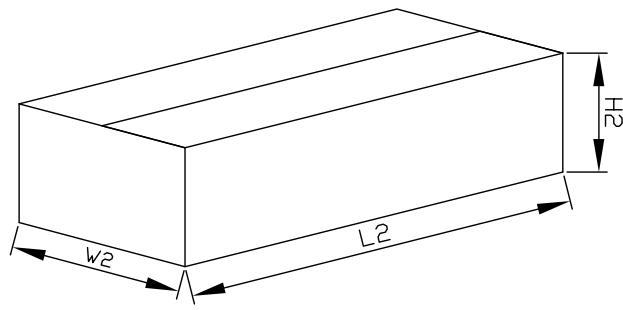
### 1.Tube Dimensions



### 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			