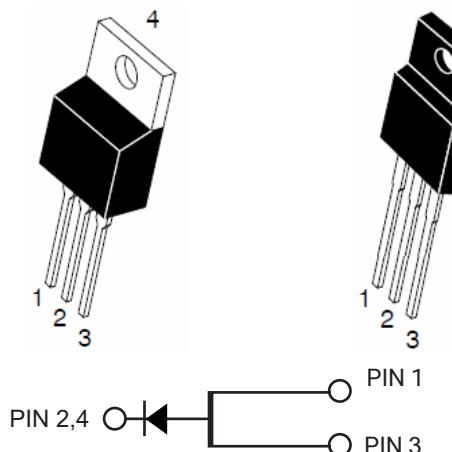


Trench MOS Barrier Schottky Rectifier

TO-220AB
TSR10S100CT-S



ITO-220AB
TSR10S100CTF-S

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)

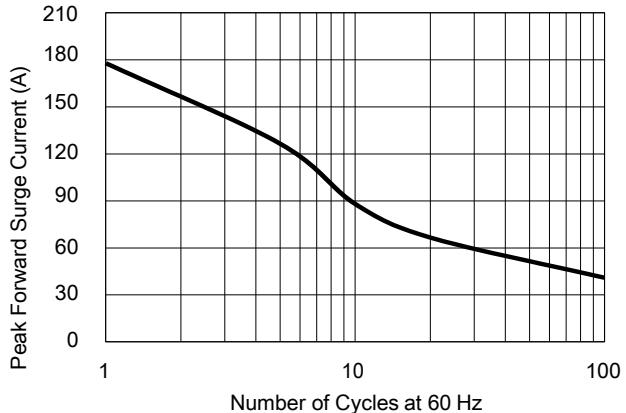
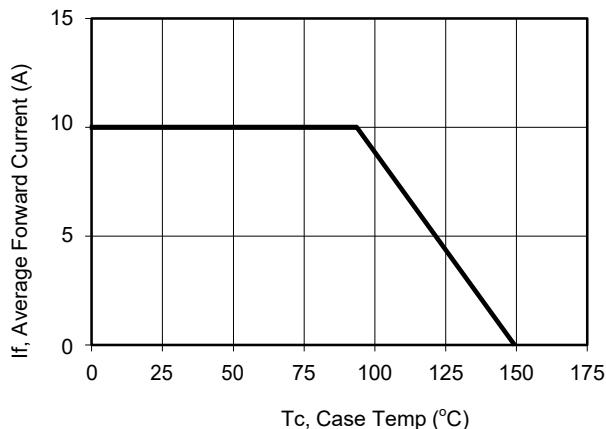
Parameter	Symbol	Limit		Unit
Maximum repetitive peak reverse voltage	VRRM	100		V
Maximum average forward rectified current per device	IF(AV)	10		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode	IFSM	180		A
Operating junction and storage temperature range	T_J , TSTG	-55 to +150		$^\circ\text{C}$
Typical thermal resistance per leg	TO-220AB	R θ J _C	2	
	ITO-220AB		4	
Instantaneous forward voltage per diode		VF(1)	TYP.	MAX.
	IF=3A $T_J=25^\circ\text{C}$		0.45	0.53
	IF=3A $T_J=125^\circ\text{C}$		0.39	-
	IF=10A $T_J=25^\circ\text{C}$		0.60	0.67
	IF=10A $T_J=125^\circ\text{C}$		0.55	-
Instantaneous reverse current per diode at rated reverse voltage	$T_J=25^\circ\text{C}$	IR(2)	5	50 μA
	$T_J=125^\circ\text{C}$		5	- mA

Notes:

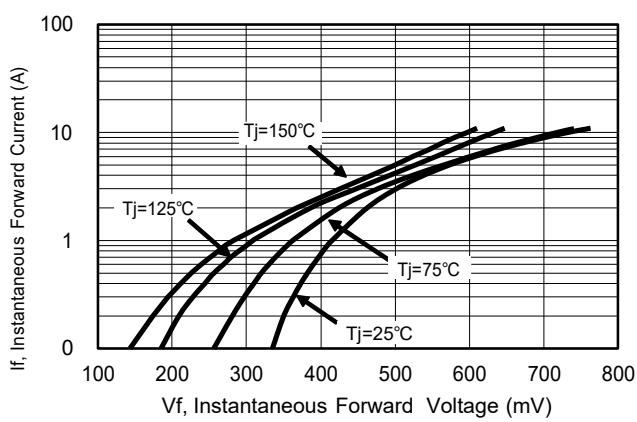
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

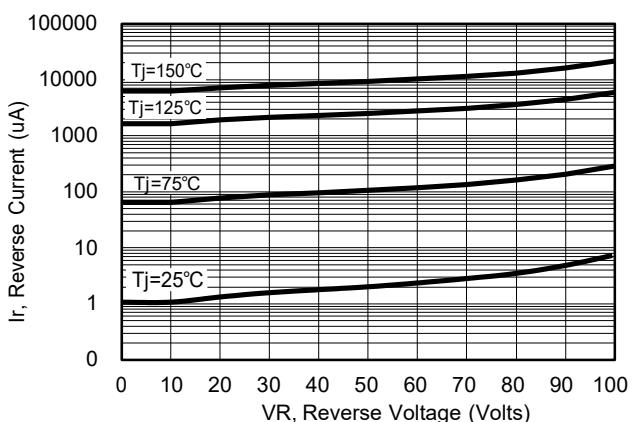
RATINGS AND CHARACTERISTICS CURVES ($T_A = 25^\circ\text{C}$ unless otherwise noted)



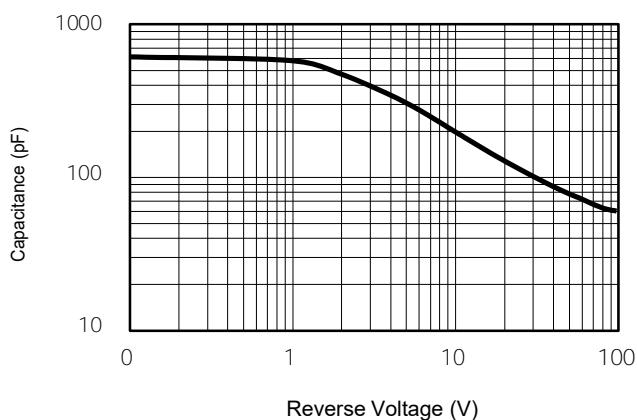
Current Derating, Case



Maximum Repetitive Surge Current



Typical Forward Voltage



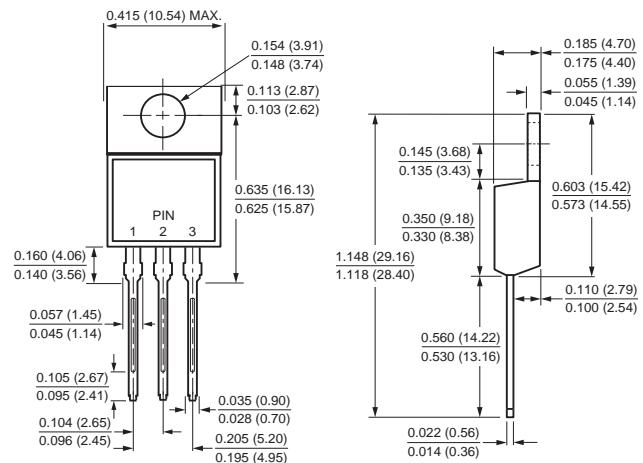
Typical Reverse Current

Typical Junction Capacitance

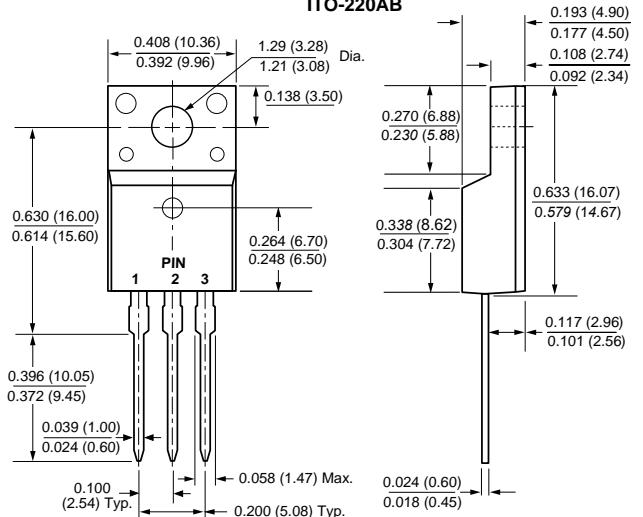
PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

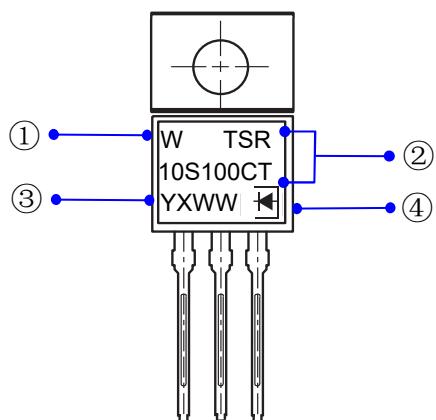
TO-220AB



ITO-220AB



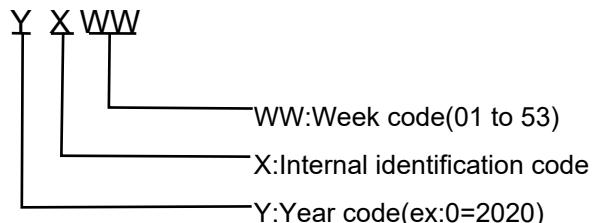
Marking Information



① W : Company's trademark

② Product model : TSR10S100CT or TSR10S100CTF

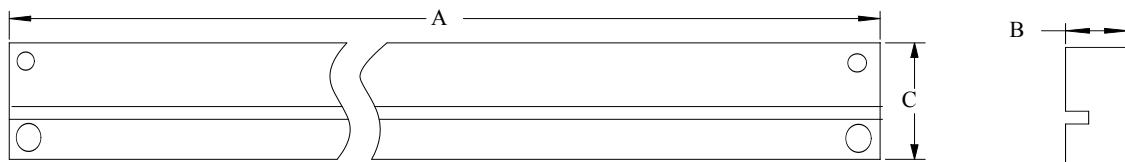
③ PDC information:



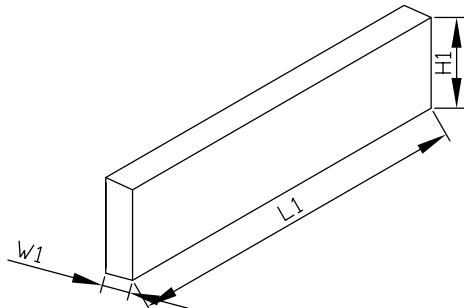
④ Singal wafer

Packaging Information

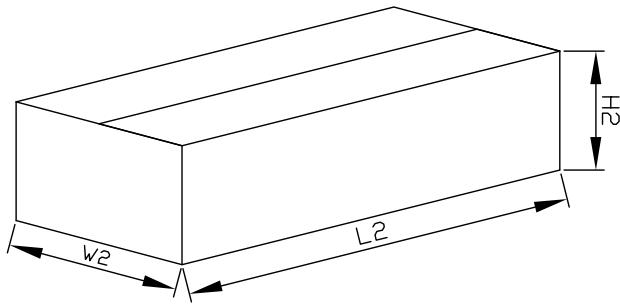
1.Tube Dimensions



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			