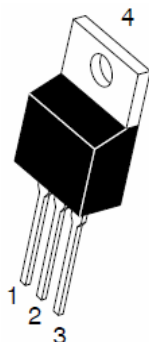
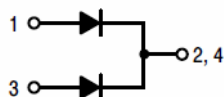
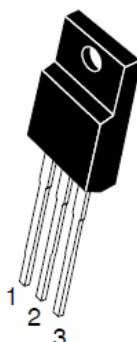


Trench MOS Barrier Schottky Rectifier

TO-220AB
TSR20V120CT



ITO-220AB
TSR20V120CTF



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°C unless otherwise noted)

Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	120		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	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			VF(1)	TYP.	MAX.	V
	IF=3A	TJ=25°C		0.49	-	
	IF=3A	TJ=125°C		0.42	-	
	IF=10A	TJ=25°C		0.70	0.75	
	IF=10A	TJ=125°C		0.60	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	-	50	uA
		TJ=125°C		5	10	mA

Notes:

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

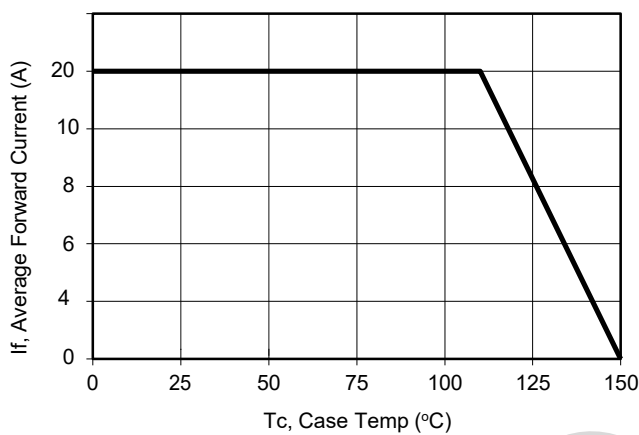
(2) Pulse test: Pulse width ≤ 40 ms

TSR20V120CT

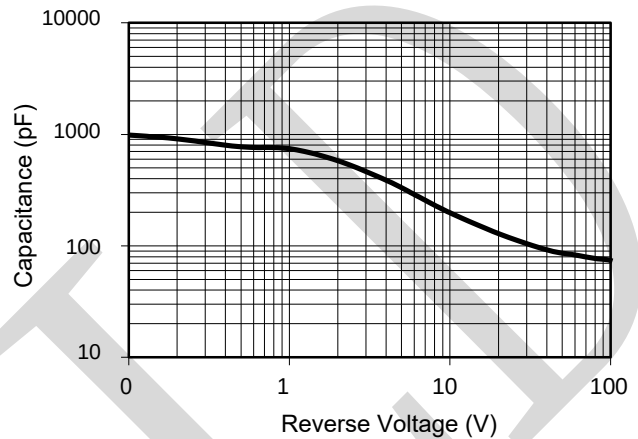
TSR20V120CTF

23-NOV-2015

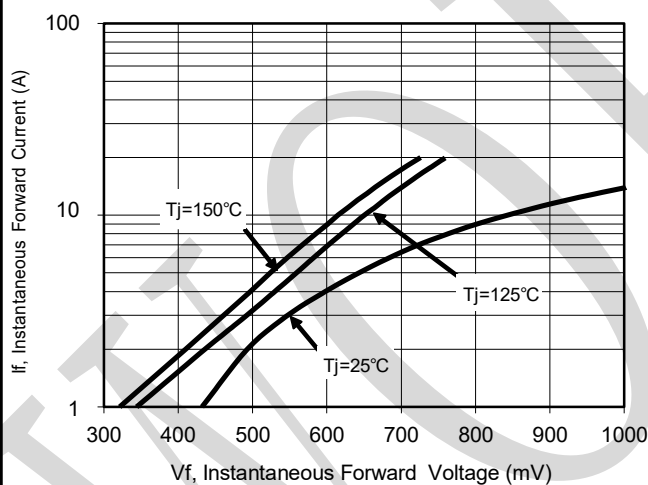
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



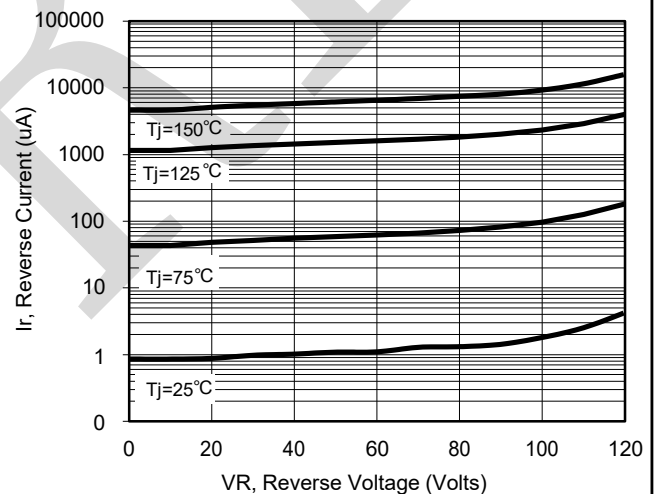
Current Derating, Case



Typical Junction Capacitance



Typical Forward Voltage

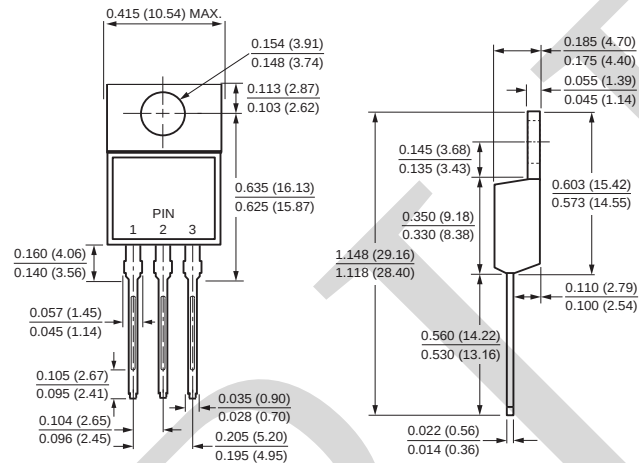


Typical Reverse Current

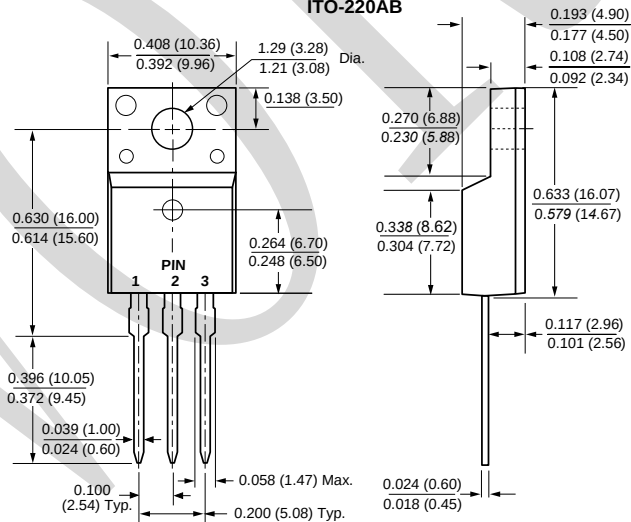
PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

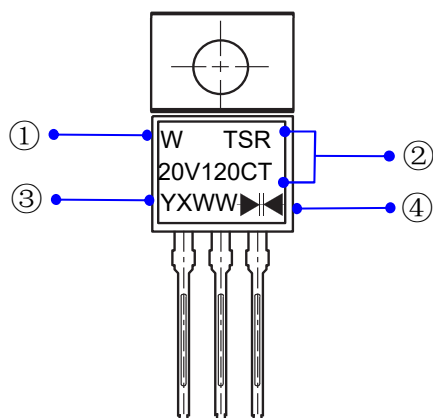
TO-220AB



ITO-220AB



Marking Information



①W : Company's trademark

②Product model : TSR20V120CT or TSR20V120CTF

③PDC information :

Y X WW

WW:Week code(01 to 53)

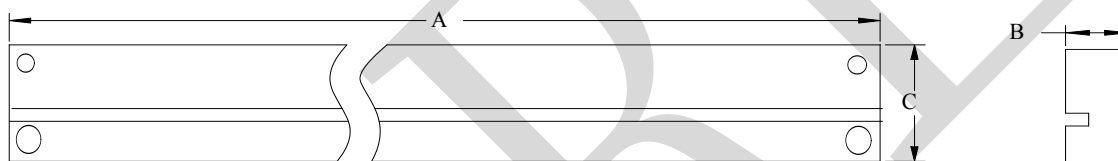
X:Internal identification code

Y:Year code(ex:0=2020)

④ Double wafer

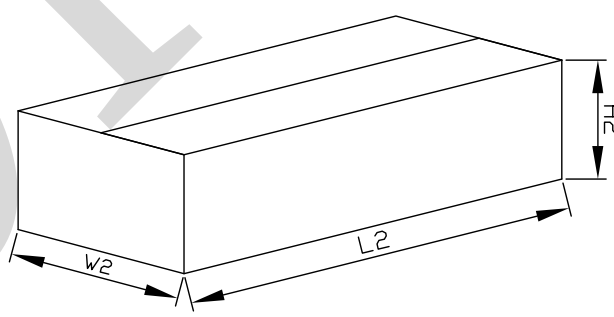
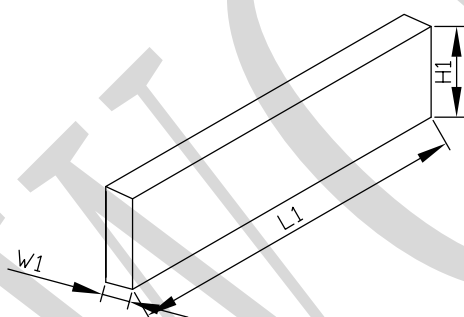
Packaging Information

1.Tube Dimensions



2. Inside Box

3. Outside Box



Packaging Information

NO	UNIT	Tube Dimensions			Inside Box			Outside Box		
Size	mm	A	B	C	L1	W1	H1	L2	W2	H2
		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									