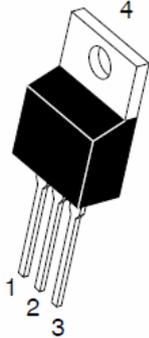
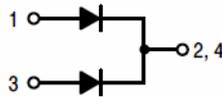
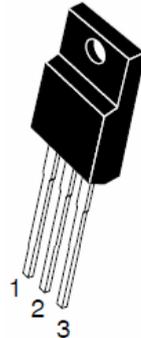


Trench MOS Barrier Schottky Rectifier

TO-220AB
TSR40L120CT



ITO-220AB
TSR40L120CTF



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)	40		A
	per diode		20		
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode		IFSM	280		A
Operating junction and storage temperature range		T _J , T _{STG}	-50 to +150		°C
Typical thermal resistance per leg	TO-220AB	R _{θJC}	2		°C/W
	ITO-220AB		4		°C/W
Instantaneous forward voltage per diode			TYP.	MAX.	V
	IF=5A	T _J =25°C	0.55	0.63	
	IF=5A	T _J =125°C	0.48	-	
	IF=20A	T _J =25°C	0.76	0.85	
Instantaneous reverse current per diode at rated reverse voltage			10	90	μA
			10	-	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)

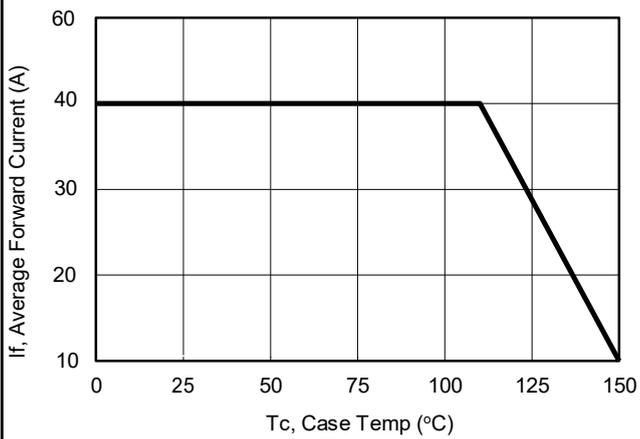


Figure 1: Current Derating, Case

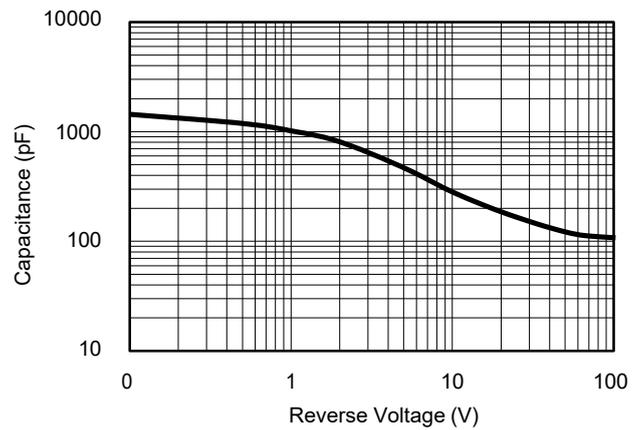
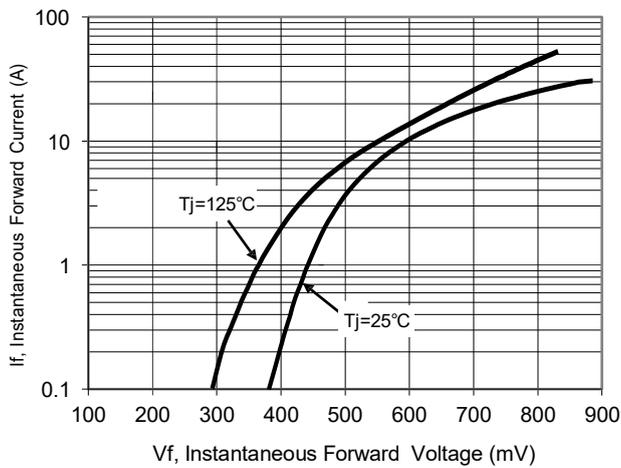
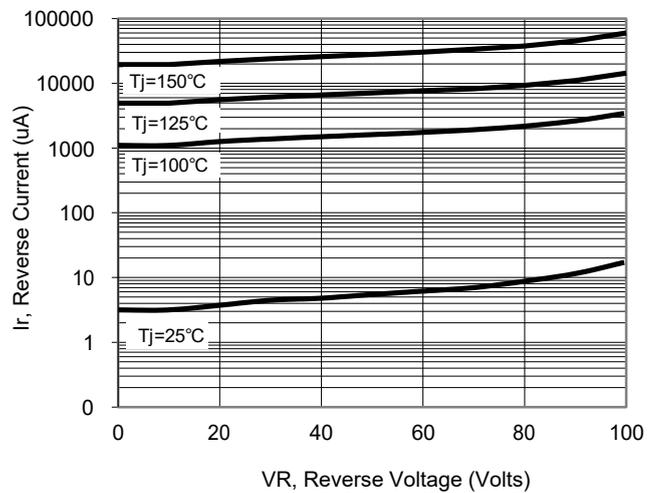


Figure 2: Typical Junction Capacitance



Typical Forward Voltage

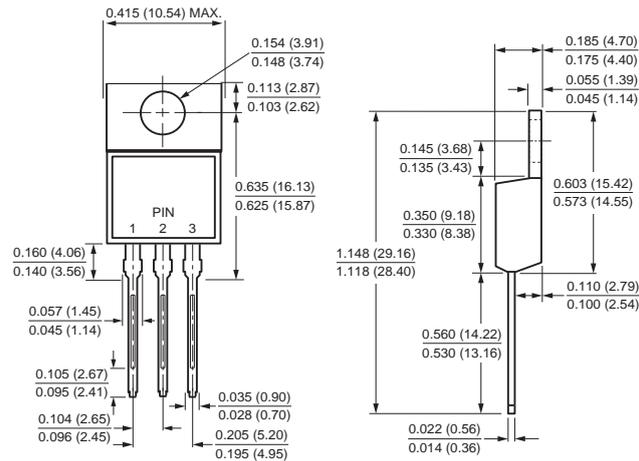


Typical Reverse Current

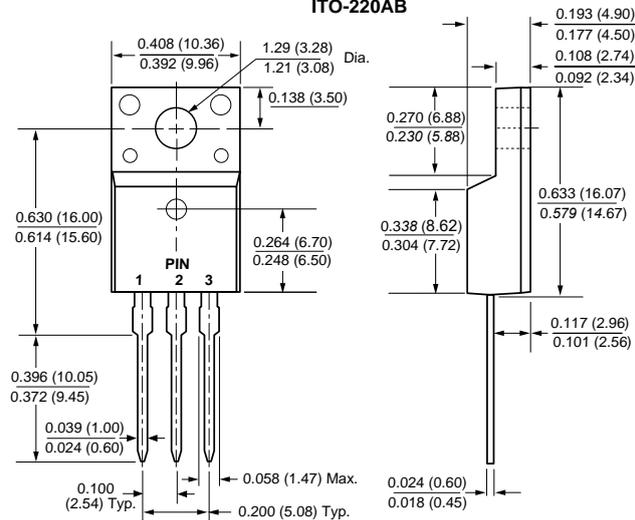
PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

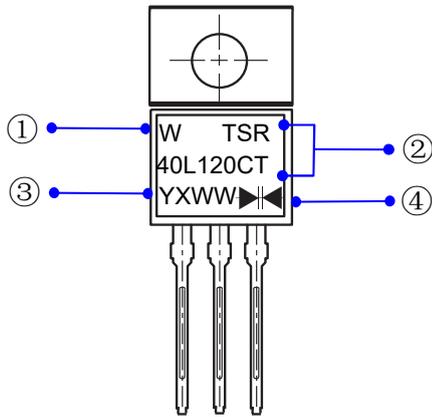
TO-220AB



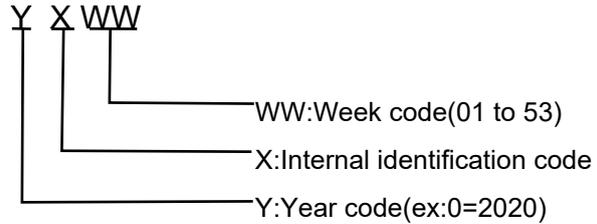
ITO-220AB



Marking Information



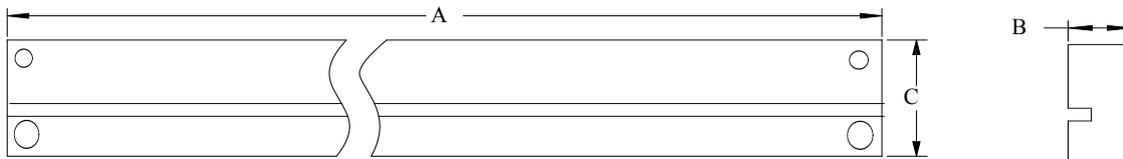
- ① W : Company's trademark
- ② Product model : TSR40L120CT or TSR40L120CTF
- ③ PDC information :



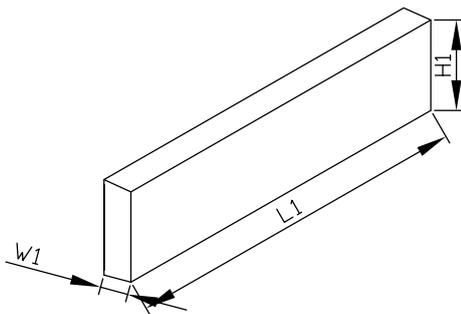
- ④  Double wafer

Packaging Information

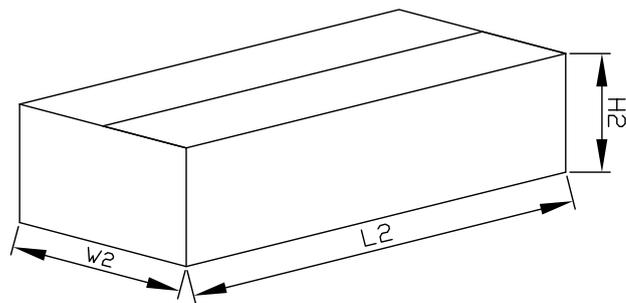
1. Tube Dimensions



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
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									