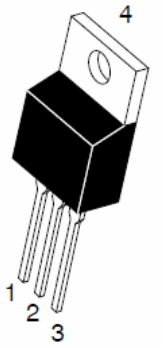
TSR20L45CT
TSR20L45CTF

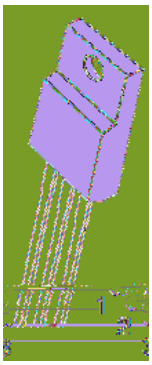
19-NOV-2013

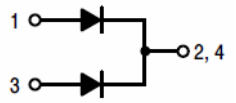
Trench MOS Barrier Schottky Rectifier

TO-220AB
TSR20L45CT



ITO-220AB
TSR20L45CTF





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 (TJ = 25°C unless otherwise noted)

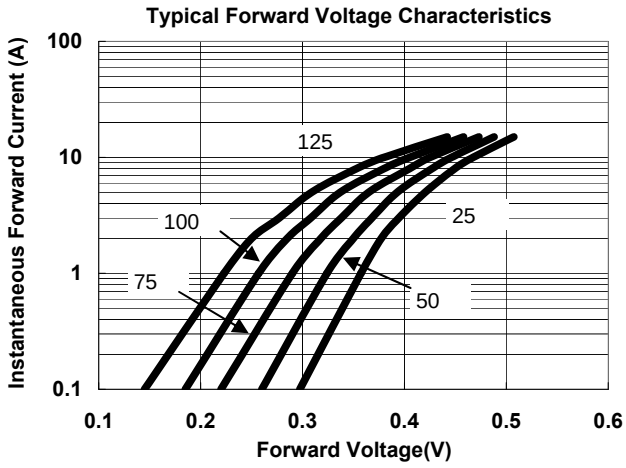
Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	45		V
Maximum average forward rectified current		device	IF(AV)	20		A
		per diode		10		
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode			IFSM	220		A
Operating junction and storage temperature range			TJ, TSTG	-40 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.	
	IF=3A	TJ=25°C		0.36	-	V
	IF=3A	TJ=125°C		0.33	-	
	IF=10A	TJ=25°C		0.48	0.55	
	IF=10A	TJ=125°C		0.43	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	50	200	uA
		TJ=125°C		-	20	mA

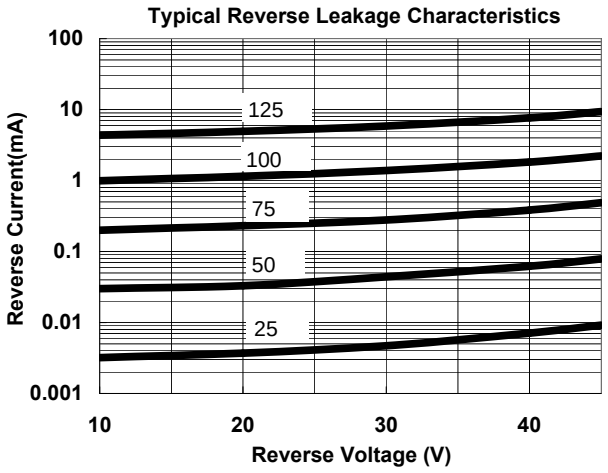
Notes:

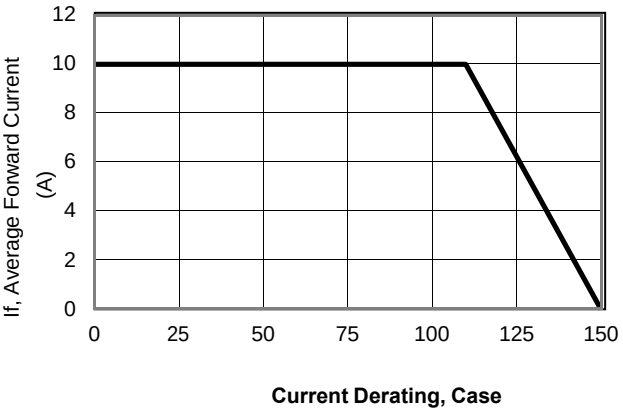
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

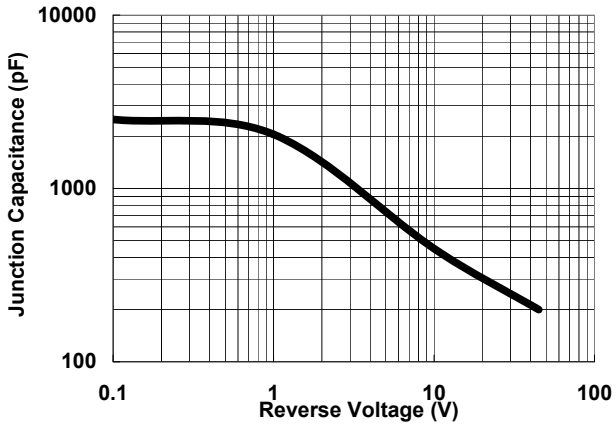
(2) Pulse test: Pulse width ≦ 40 ms

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

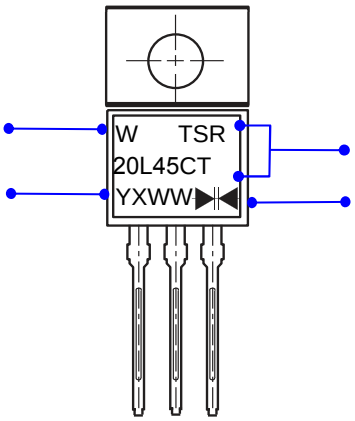








Marking Information



W : Company's trademark
Product model : TSR20L45CT or TSR20L45CTF
PDC information

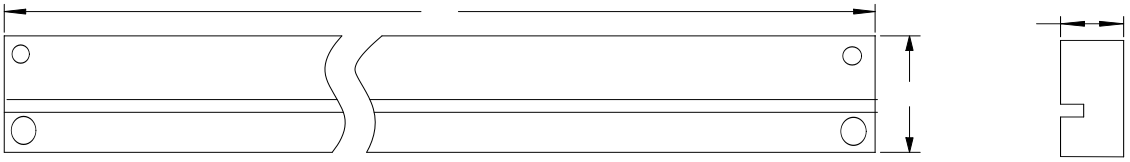
Y X WW

WW:Week code(01 to 53)
X:Internal identification code
Y:Year code(ex:0=2020)

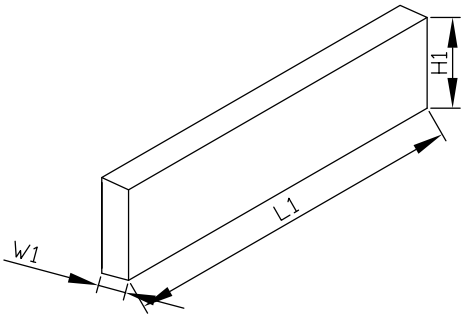
Double wafer

Packaging Information

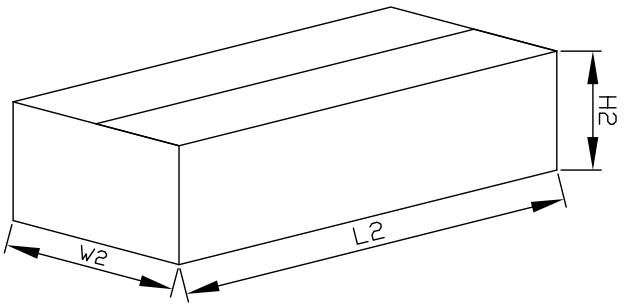
1.Tube Dimensions



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									