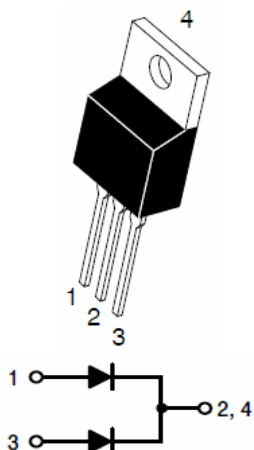


Trench MOS Barrier Schottky Rectifier

TSR40V300CT

TO-220AB



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)

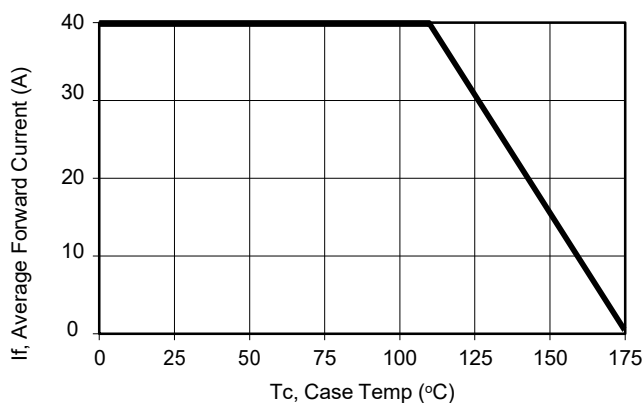
Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	300		V
Maximum average forward rectified current	device	IF(AV)	40		A	
	per diode		20			
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode			IFSM	280		A
Operating junction and storage temperature range			TJ, TSTG	-50 to +175		°C
Typical thermal resistance per leg		TO-220AB	RθJC	2		°C/W
Instantaneous forward voltage per diode			VF(1)	TYP.	MAX.	V
	IF=3A	TJ=25°C		0.80	0.95	
	IF=3A	TJ=125°C		0.78	-	
	IF=20A	TJ=25°C		1.00	1.25	
	IF=20A	TJ=125°C		0.96	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	5	50	uA
		TJ=125°C		5	-	mA

Notes:

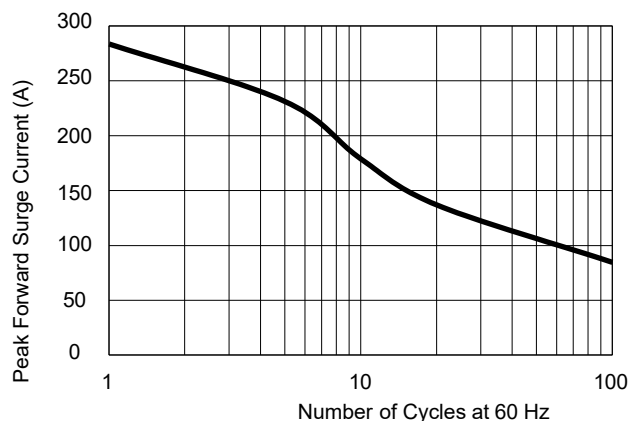
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

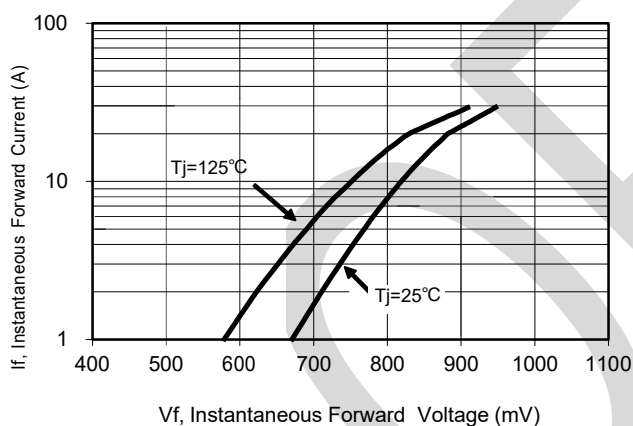
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



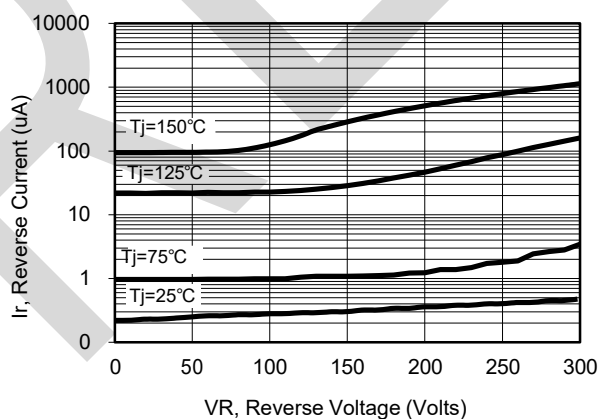
Current Derating, Case



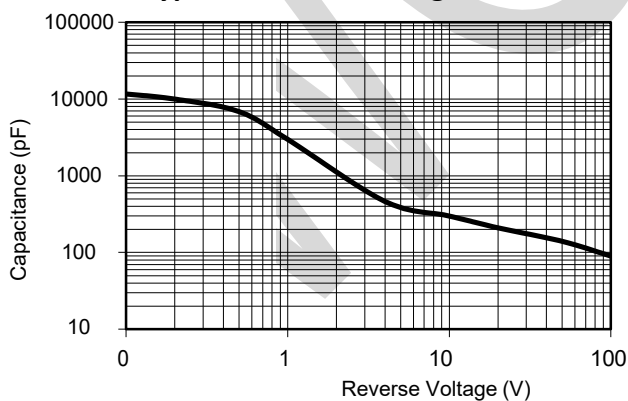
Maximum Repetitive Surge Current



Typical Forward Voltage



Typical Reverse Current

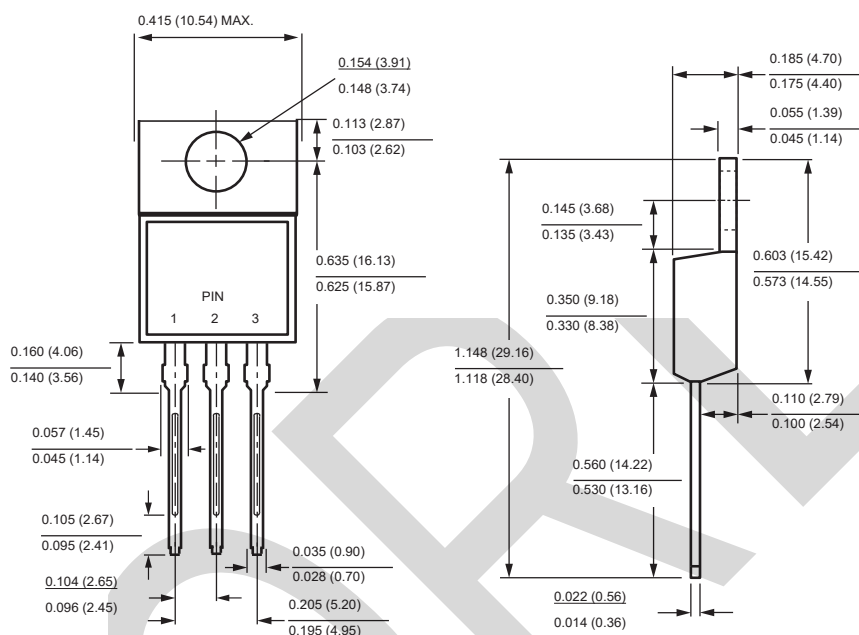


Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS

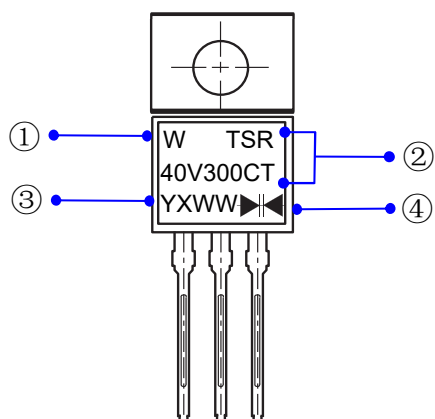
Note:unit: mm

TO-220AB



Dimensions in millimeters

Marking Information



- ①W : Company's trademark
②Product model : TSR40V300CT
③PDC information:

Y X WW

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)

- ④  Double wafer