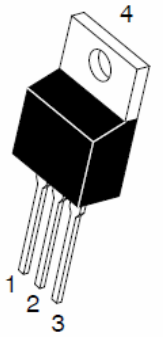
TSR30V60CT
TSR30V60CTF

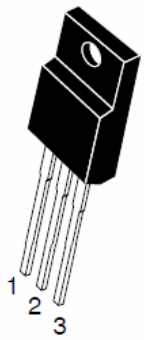
19-NOV-2013

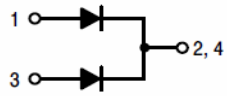
Trench MOS Barrier Schottky Rectifier

TSR30V60CT
TO-220AB



TSR30V60CTF
TO-220F





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)

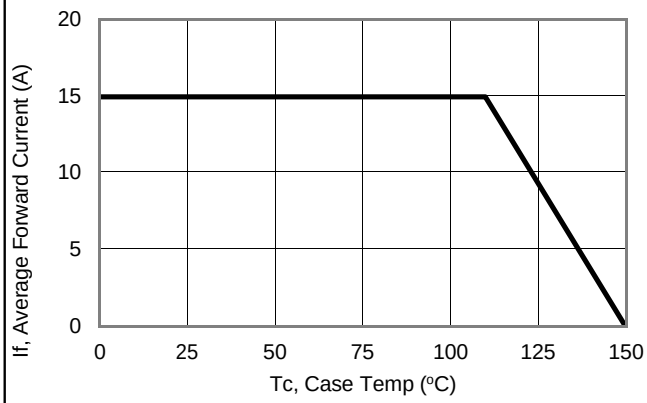
Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			V_{RRM}	60		V
Maximum average forward rectified current		per device	$I_{F(AV)}$	30		A
		per diode		15		
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode			I_{FSM}	280		A
Operating junction and storage temperature range			T_J, T_{STG}	-40 to +150		°C
Typical thermal resistance per leg		TO-220	$R_{\Theta JC}$	2		°C/W
		TO-220F		4		°C/W
Instantaneous forward voltage per diode			$V_{F(1)}$	TYP.	MAX.	
	I_F=5A	T_J=25°C		0.38	-	V
	I_F=15A			-	0.56	
	I_F=5A	T_J=125°C		0.34	-	
	I_F=15A			0.45	0.48	
Instantaneous reverse current per diode at rated reverse voltage		T_J=25°C	$I_{R(2)}$	-	50	uA
		T_J=125°C		30	-	mA

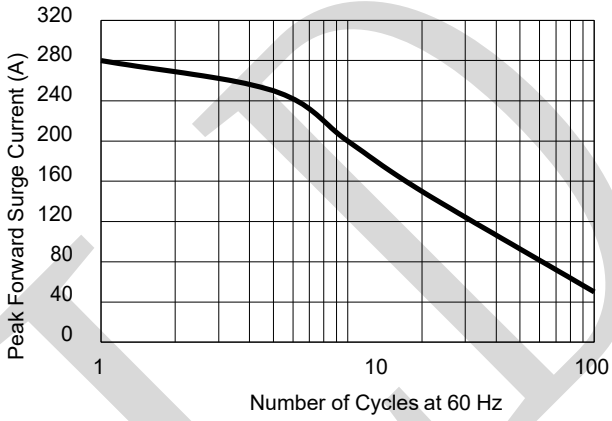
Notes:

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

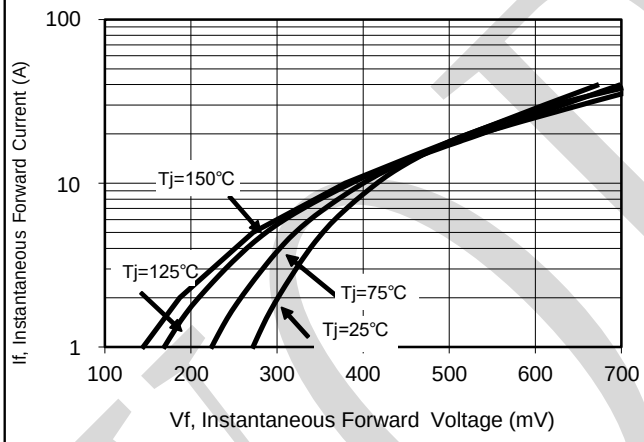
(2) Pulse test: Pulse width ≦ 40 ms

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

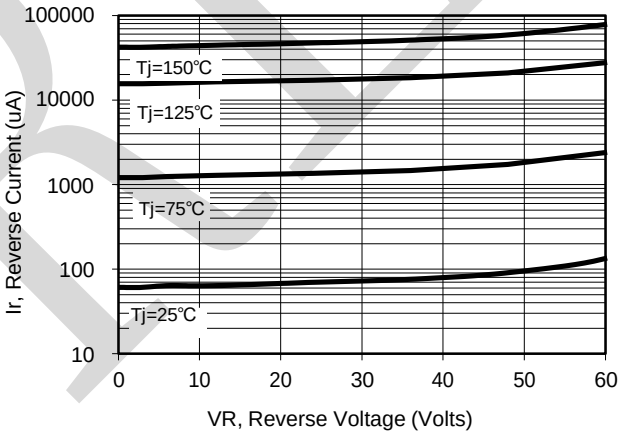




Current Derating, Case

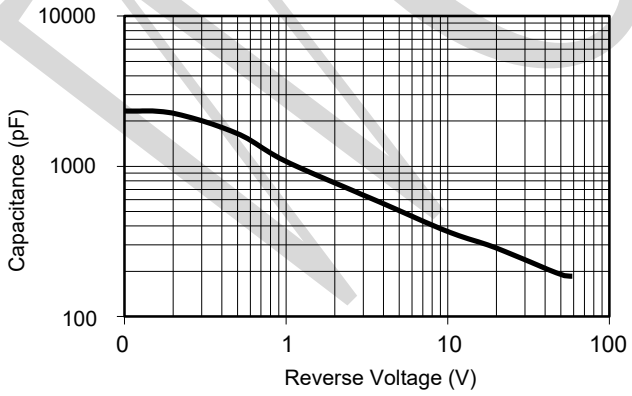


Maximum Repetitive Surge Current



Typical Forward Voltage

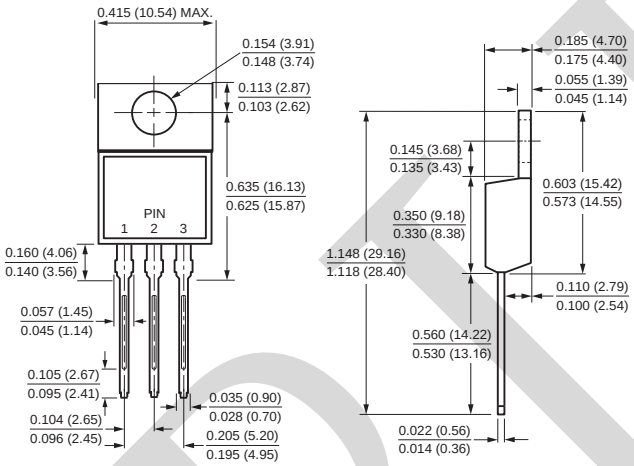
Typical Reverse Current



Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS

TO-220AB



TO-220F