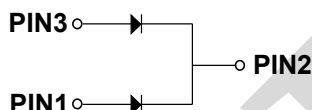
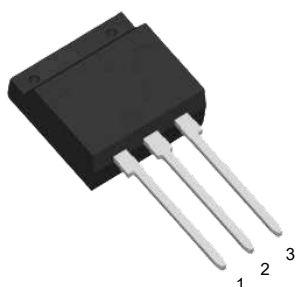


Trench MOS Barrier Schottky Rectifier

TO-262F TSR20P100CKF



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	100		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	150		A
Operating junction and storage temperature range			T _J , T _{STG}	-55 to +150		°C
Typical thermal resistance per leg			R _{ΘJC}	2.5		°C/W
Instantaneous forward voltage per diode			VF(1)	TYP.	MAX.	V
	IF=2A	TJ=25°C		0.61	-	
	IF=2A	TJ=125°C		0.55	-	
	IF=10A	TJ=25°C		0.82	0.85	
	IF=10A	TJ=125°C		0.75	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	1	10	uA
		TJ=125°C		-	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)

Fig.1 Current Derating, Case

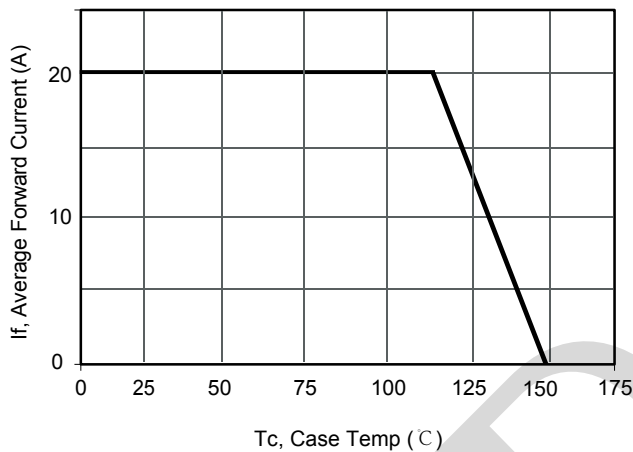


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

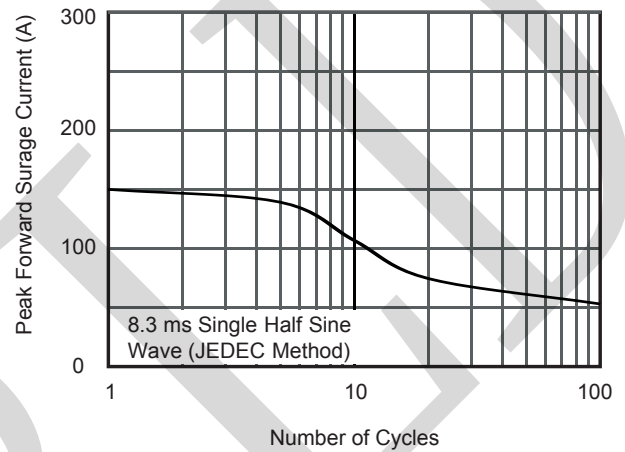


Fig.3 Typical Forward Voltage

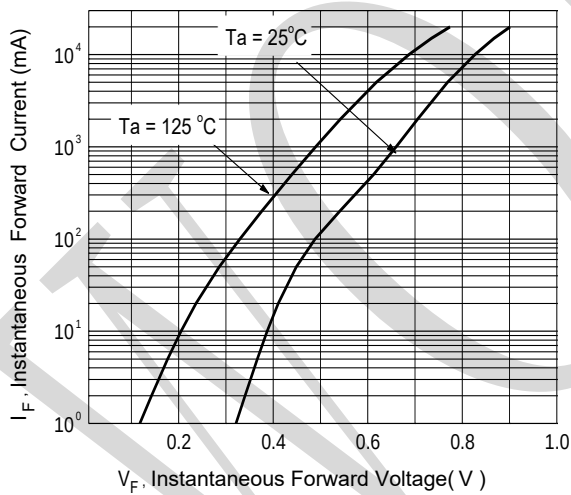
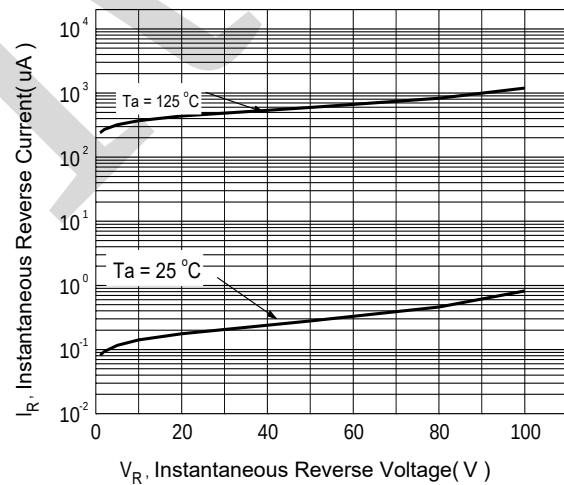
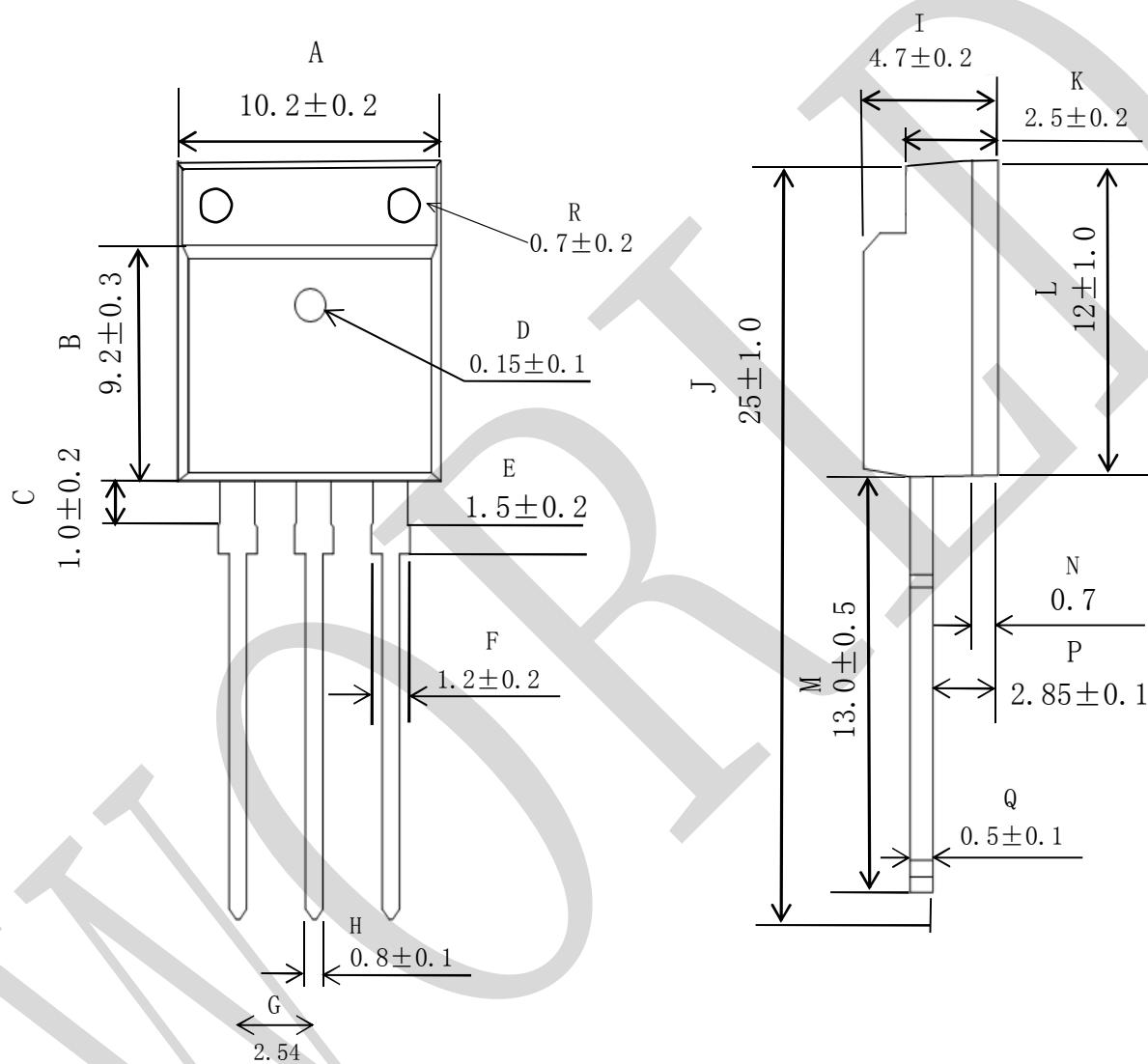


Fig.4 Typical Reverse Characteristics



PACKAGE OUTLINE DIMENSIONS

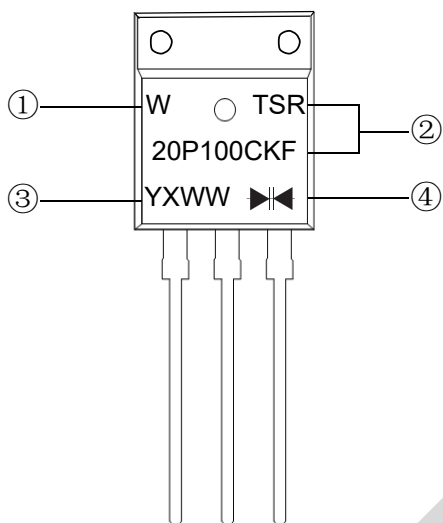
TO-262F



Note: unit in (mm)

General tolerance: ± 0.2 mm unless otherwise specified.

Marking Information



①W : Company's trademark

②Product model : TSR20P100CKF

③PDC information:

Y X WW

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)

④ Double wafer