TECH PUBLIC
台舟电子

TPNSR01F30NXT5G
Schottky barrier diode

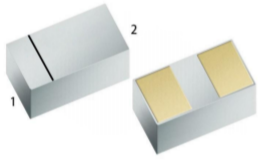
WWW.TECHPUBLIC.COM

Features

- High Continuous Forward Current
- Low Reverse Current
- Very Low Forward Voltage Drop
- Very High Switching Speed

Applications

- surface mount schottky barrier rectifier
- Buck and Boost dc−dc Converters
- Reverse Voltage and Current Protection
- Clamping & Protection



CSP0201



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	30	V
Forward Current (DC)	I_F	100	mA
Forward Surge Current (60 Hz @ 1 cycle)	I_{FSM}	4.0	A
ESD Rating: Human Body Model	ESD	>8. 0	KV
ESD Rating: Machine Model		>400	V

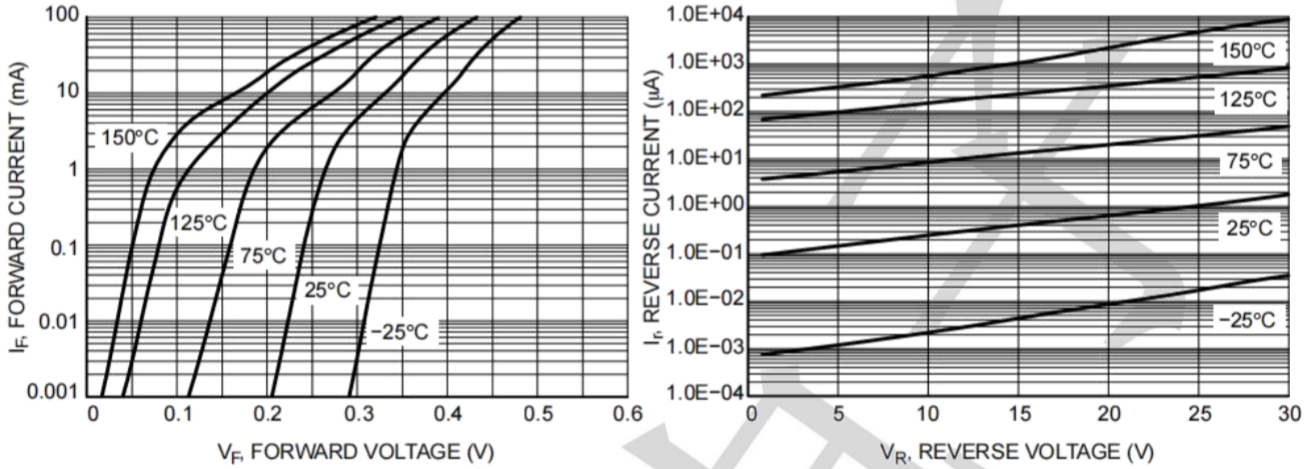
Thermal Characteristics

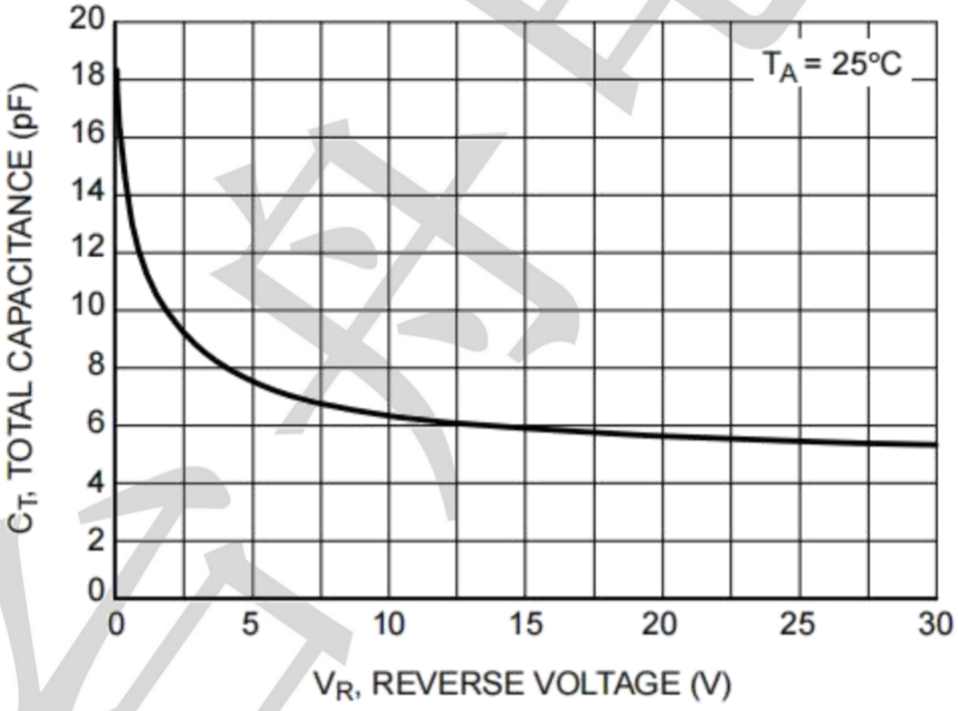
Parameter	Symbol	Value	Unit
Total Power Dissipation	PD	312	mW
Typical Thermal Resistance per leg @TA = 25°C	RθJA	400	°C/W
Operating Junction Temperature Range	T_J	−40 to +125	°C
Storage Temperature Range	T_{STG}	−40 to +125	°C
Mounted onto a 4 in square FR−4 board 10 mm sq. 1 oz. Cu 0.06" thick single sided. Operating to steady state.			

Electrical Characteristics (TA=25°C unless otherwise specified)

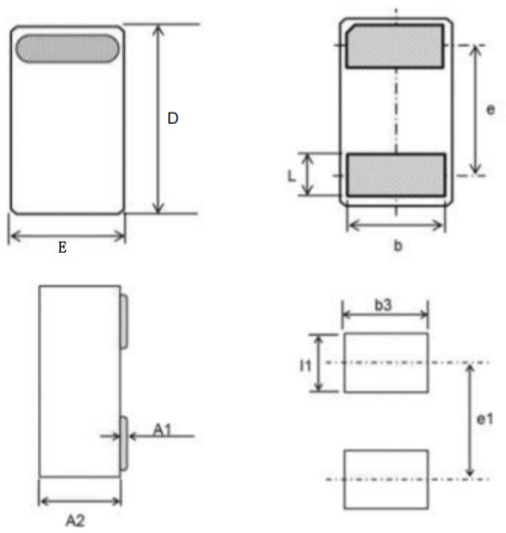
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF*	--	--	0.37	V	IF=10mA
		--	--	0.55	V	IF=100mA
Reverse Leakage	I_R**	--	--	7	uA	VR = 10 V
		--	--	50	uA	VR = 30 V
Total Capacitance	C_T	--	7.0	--	pF	VR = 5.0 V, f = 1 MHz
*Pulse width ≤380 uS, Duty cycle < 2%; **pulse test ， tp≤5ms						

TypicalElectrical CharacteristicCurves



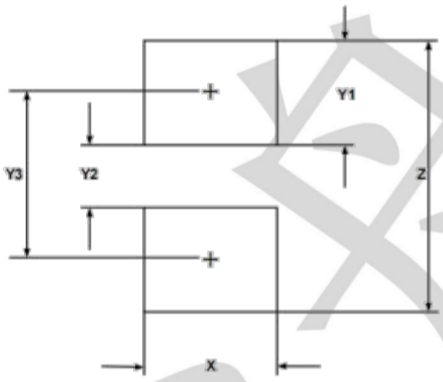


Outline Drawing - CSP0201



SYM	DIMENSIONS		
	MILLIMETERS		
	MIN	NOM	MAX
A	0.230	0.300	0.330
A1	0.000	0.020	0.050
b	0.215	0.245	0.275
c	0.120	0.150	0.180
D	0.550	0.600	0.650
e	0.355 BSC		
E	0.250	0.300	0.350
L	0.160	0.190	0.220
h	0.079 BSC		

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X	0.30	0.012
Y1	0.25	0.010
Y2	0.15	0.006
Y3	0.40	0.016
Z	0.65	0.026