_s 201

Automotive Schottky Barrier Diode designed for compact and efficient designs. AEC–Q101 qualified Schottky Barrier Diode and PPAP capable suitable for automotive applications.

Features

- Small Interterminal Capacitance
- Less Parasitic Components
- Small Forward Voltage
- Small-sized Package
- Pb-Free, Halogen Free and RoHS Compliant
- AEC-Q101 Qualified and PPAP Capable

Typical Applications

- Microwave and Submilliwave Mixer
- Microwave and Submilliwave Detector

Specifications

Table 1. ABSOLUTE MAXIMUM RATINGS at $T_A = 25^{\circ}C$

Parameter	Symbol	Value	Unit	
Reverse Voltage	V _R	2	V	
Forward Current	١ _F			
	T _{J,} T _{stg}	-55 to +150	°C	

Stresses exceeding those listed in the Maximum Ratings table may damage the

1

NSVR201MX

Table 2. ORDERING INFORMATION

Device	Device Marking		Shipping†		
NSVR201MXT5G	RF	X2DFN2 1.0 x 0.65 P (Pb–Free / Halogen Free)	8,000 / Tape & Real		

+For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, BRD8011/D.

Table 3. ELECTRICAL CHARACTERISTICS at T_A = $25^{\circ}C$ (Notes 1, 2)

			Value			
Parameter	Symbol	Conditions	Min	Тур	Max	Units
Reverse Voltage	V _R	I _R = 10 μA	2			V
Forward Voltage	V _F	I _F = 1 mA			320	mV
Series Resistance	R _S	I _F	-	-		

NSVR201MX

Figure

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Figure 1.

Freq	l = 0	I = 0 mA I = 0		2 mA I = 0.05 mA		l = 0.1 mA		l = 0.2 mA		l = 0.5 mA		
[GHz]	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
1	0.964	-4.4	0.988	-4.3	0.978	-4.3	0.963	-4.3	0.933	-4.4	0.845	-4.3
2	0.967	-9.7	0.990	-9.6	0.981	-9.6	0.966	-9.7	0.937	-9.7	0.852	-9.5
3	0.957	-15.2	0.981	-15.1	0.971	-15.2	0.956	-15.2	0.925	-15.4	0.838	-15.7
4	0.956	-20.5	0.980	-20.3	0.970	-20.5	0.956	-20.5	0.925	-20.6	0.840	-20.4
5	0.961	-26.0	0.986	-25.7	0.977	-25.9	0.960	-26.0	0.929	-26.2	0.838	-26.3
6	0.954	-32.3	0.981	-31.9	0.970	-32.1	0.953	-32.3	0.919	-32.5	0.822	-32.5
7	0.943	-39.2	0.969	-38.7	0.959	-39.0	0.942	-39.2	0.909	-39.6	0.814	-40.4
8	0.943	-45.7	0.967	-45.2	0.958	-45.4	0.942	-45.7	0.911	-46.2	0.823	-47.4
9	0.947	-52.8	0.975	-52.2	0.963	-52.5	0.946	-52.8	0.910	-53.3	0.809	-54.2
10	0.940	-60.6	0.968	-59.9	0.957	-60.2	0.938	-60.6	0.902	-61.2	0.799	-62.6
11	0.921	-69.7	0.950	-68.9	0.939	-69.3	0.919	-69.7	0.883	-70.4	0.777	-72.0
12	0.895	-80.4	0.928	-79.4	0.914	-79.9	0.893	-80.4	0.852	-81.2	0.738	-83.5
13	0.882	-88.8	0.912	-87.7	0.900	-88.2	0.881	-88.8	0.843	-89.6	0.735	267.9
14	0.872	261.9	0.906	263.1	0.893	262.4	0.871	261.9	0.831	261.0	0.715	258.8
15	0.870	252.7	0.900	253.9	0.887	253.2	0.868	252.6	0.830	251.6	0.723	249.0
16	9.874	242.8	0.903	244.1	0.891	243.4	0.873	242.7	0.838	241.6	0.733	238.1
17	ø.874	231.6	0.907	233.1	0.894	232.3	0.873	231.6	0.833	230.4	0.720	227.0
18	0.877	220.8	0.911	222.5	0.898	221.6	0.875	220.7	0.833	219.3	0.715	215.4
19	0.860	210.3	0.895	212.1	0.881	211.1	0.859	210.2	0.817	208.7	0.700	204.2
20	0.847	198.7	0.880	200.7	0.866	199.6	0.845	198.7	0.806	197.2	0.692	192.7
21	0.841								0		8	

Table 4. S PARAMETER ($Z_O = 50 \Omega$)

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X2DFN2 1.00x0.60x0.37, 0.65P CASE 714AB ISSUE C

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