



WEET Technology Company Limited

Schottky Barrier Rectifiers

1N5820 THRU 1N5822

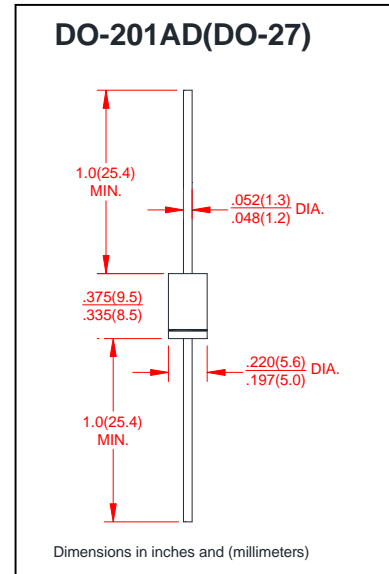
VOLTAGE RANGE 20 to 40 Volts
CURRENT 3.0 Ampere

FEATURES

- Low switching noise
- Low forward voltage drop
- High forward surge capability
- High reliability
- High temperature soldering guaranteed
260°C/10 seconds, 0.375" (9.5mm) lead length at 5 lbs (2.3kg) tension

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.012ounce, 0.33 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	1N5820	1N5821	1N5822	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length at $T_L=95^\circ\text{C}$	$I_{(AV)}$	3.0			Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80			Amps
Maximum Instantaneous Forward Voltage at 3.0A	V_F	0.475	0.500	0.525	Volts
Maximum Instantaneous Forward Voltage at 9.4A		0.850	0.900	0.950	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A = 25^\circ\text{C}$			mA
		$T_A = 100^\circ\text{C}$			
Typical Junction Capacitance (NOTE 1)	C_J	250			pF
Typical Thermal Resistance(Note2)	$R_{\theta JA}$	28			$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +125			$^\circ\text{C}$

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Thermal Resistance Junction to Ambient



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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

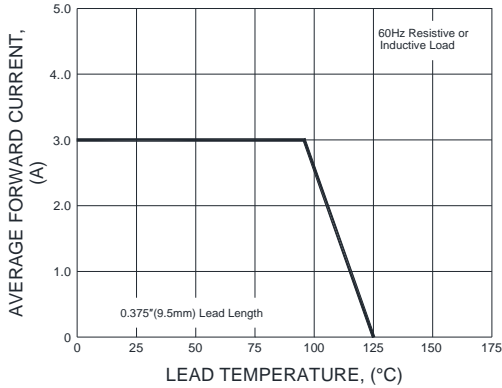


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

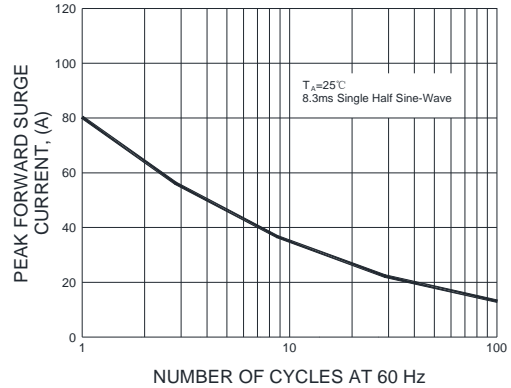


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

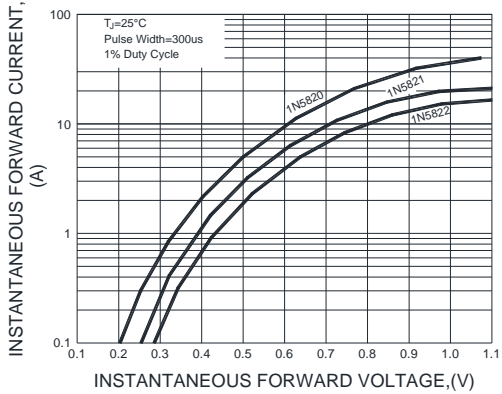


FIG.4-TYPICAL REVERSE CHARACTERISTICS

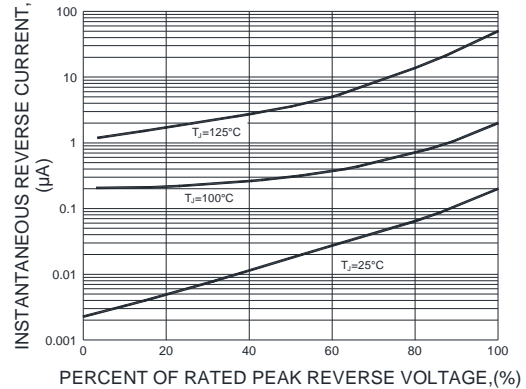
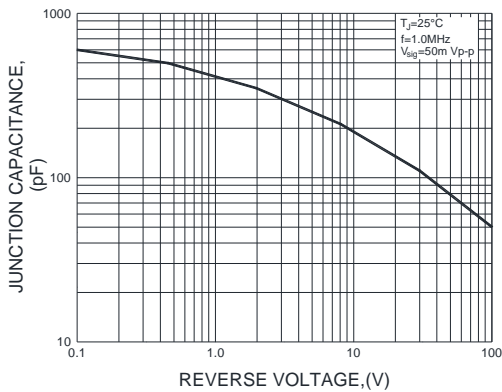


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.