

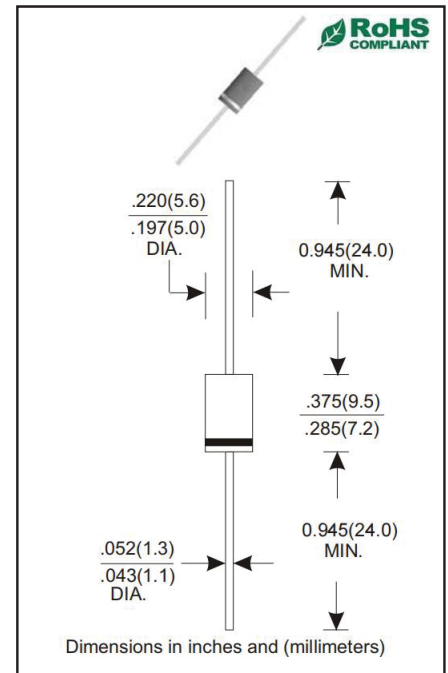
SCHOTTKY BARRIER RECTIFIER

FEATURES

- Fast switching
- Low forward voltage, high current capability
- Low power loss, high efficiency
- High current surge capability
- High temperature soldering guaranteed:
250°C/10 seconds, 0.373"(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 denoted cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.042ounce, 1.19 gram



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%.

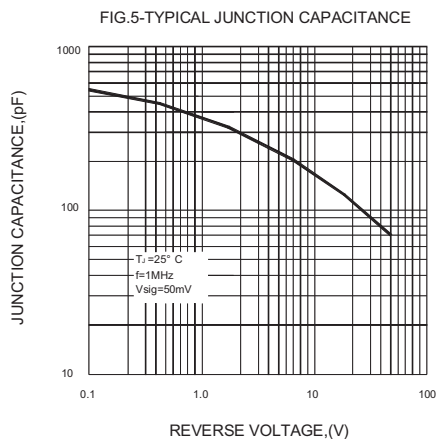
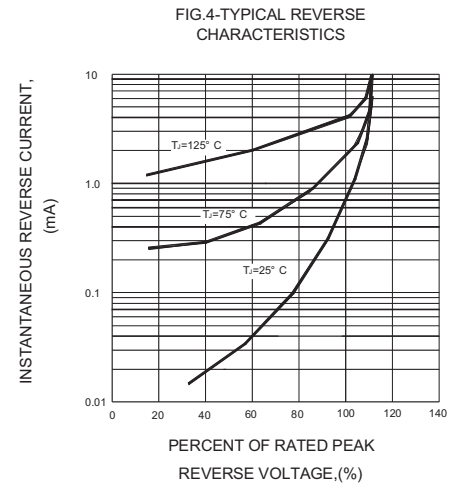
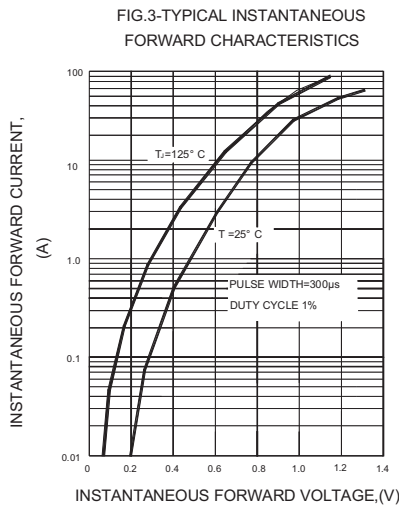
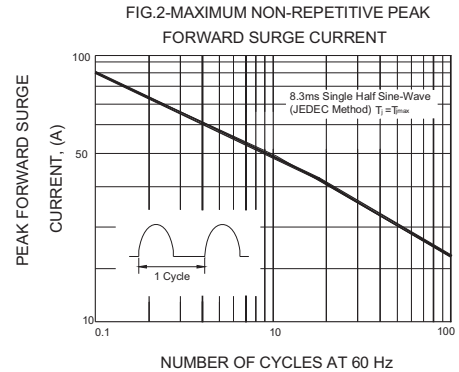
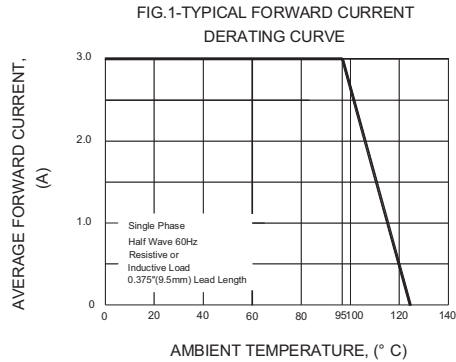
	SYMBOLS	1N5820	1N5821	1N5822	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length at $T_L=95^\circ\text{C}$	$I_{(AV)}$	3.0			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 (Note 1) at	3.0A	0.475	0.500	0.525	Volts
	9.4A	0.850	0.900	0.950	
Maximum DC Reverse Current at rated DC Blocking Voltage at (Note 1)	$T_A = 25^\circ\text{C}$	0.5			mA
	$T_A = 100^\circ\text{C}$	20			
Typical Junction Capacitance (NOTE 2)	C_J	250			pF
Typical Thermal Resistance (NOTE 3)	$R_{\theta JL}$	15			$^\circ\text{C}/\text{W}$
Operation and Storage Temperature Range	T_J, T_{STG}	(-55 to +125)			$^\circ\text{C}$

Notes:

- Pulse test 300 μs pulse width, 1% duty cycle
- Measured at 1.0MHz and applied reverse voltage of 4.0 Volts
- Thermal resistance from junction to ambient P.C.B. mounted with 0.375"(9.5mm) lead length with 2.5"×2.5" (63.5×63.5mm) copper pads

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RATING AND CHARACTERISTIC CURVES 1N5820 - 1N5822



Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.