迪一電子®

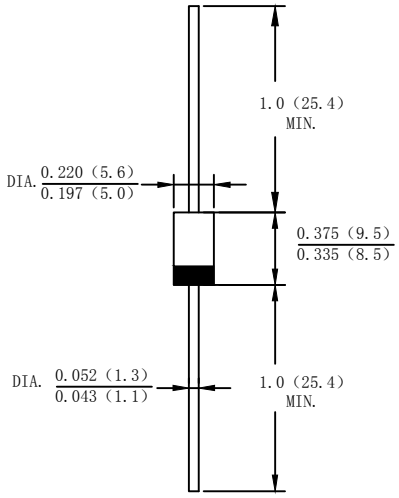
1N5820 THRU 1N5822

3.0 AMP. Schottky Barrier Rectifiers

Features

- Low power loss,high efficiency.
- High reliability
- High surge current capapbility.
- Epitaxial construction.
- For use in low voltage, high frequen inverters free wheeling and polarlity protection applications
- Plastic package has Underwriters Laboratory Plammability Classification 94V-0 utilizing

DO-201AD



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Moeded plastic DO-201AD
- Terminals: Plated leads solderable per MIL-STD-202,Method 208 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified

Single phase,half wave,60Hz,resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	1N5820	1N5821	1N5822	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Average Rectified Output Current (Note 1) @T_A=95℃	I_O	3.0			A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80			A
Forward Voltage @IF=3.0A	V_{FM}	0.55			V
Peak Reverse Current @T_A=25℃ At Rated DC Blocking Voltage @T_A=125℃	I_R	0.1 10.0			mA
Typical Junction Capacitance	C_J	250			pF
Typical Thermal Resistance Junction to Ambient(Note 2)	$R_{\theta JA}$	20			℃/W
Operating Temperature Range	T_J	-55 to + 150			℃
Storage Temperature Range	T_{STG}	-55 to + 150			℃

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2.P.C.B.mounted with 0.2×0.2" (5.0×5.0mm) copper pad areas

1N5820 THRU 1N5822

Fig. 1-FORWARD CURRENT DERATING CURVE

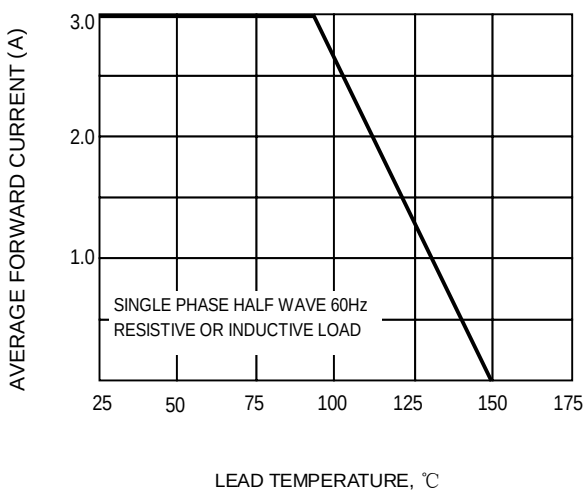
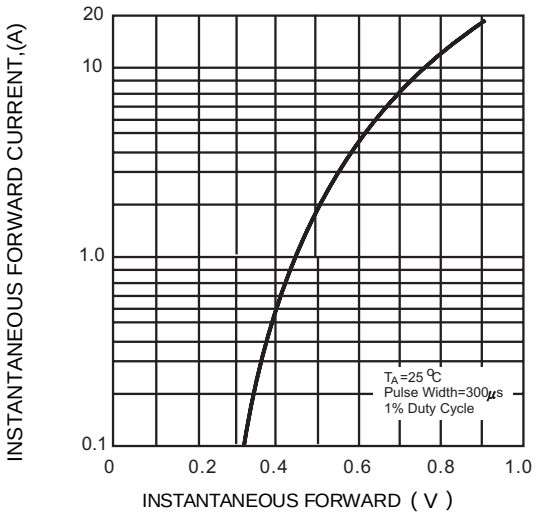


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

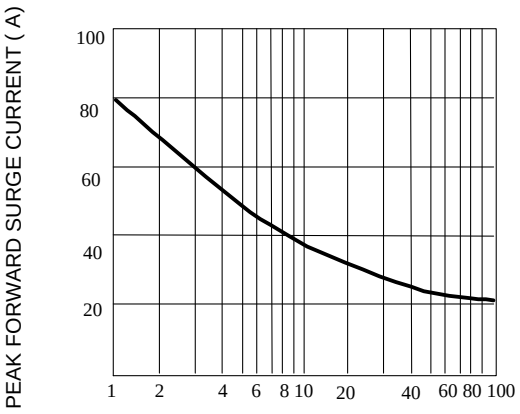


FIG.4-TYPICAL JUNC TION CAPA CITANCE