

**MDA100A series  
(3N246 thru  
3N252)**

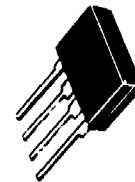
**MINIATURE INTEGRAL DIODE ASSEMBLIES**

... with silicon rectifier chips interconnected and encapsulated into voidless rectifier bridge circuits.

- High Resistance to Shock and Vibration
- High Dielectric Strength
- Built-In Printed Circuit Board Stand-Offs
- UL Recognized
- ROJA = 60°C/W



**SINGLE-PHASE  
FULL-WAVE BRIDGE**  
**1.0 AMPERE**  
**50-1000 VOLTS**



MAXIMUM RATINGS	Rating (Per Diode)	Symbol									Unit
			3N246 MDA100A	3N247 MDA101A	3N248 MDA102A	3N249 MDA104A	3N250 MDA106A	3N251 MDA108A	3N252 MDA110A		
Peak Repetitive Reverse Voltage	VRRM		50	100	200	400	600	800	1000		Volts
Working Peak Reverse Voltage	VRWM										
DC Blocking Voltage	VR										
DC Output Voltage	Vdc	Resistive Load	32	64	127	255	382	510	640		Volts
		Capacitive Load	50	100	200	400	600	800	1000		Volts
Sine Wave RMS Input Voltage	VR(RMS)		35	70	140	280	420	560	700		Volts
Average Rectified Forward Current (single phase bridge operation, resistive load, 60 Hz, TA = 75°C)	IO		1.0								Amp
			30 (for 1 cycle)								Amp
Non Repetitive Peak Surge Current (Preceded and followed by rated current and voltage, TA = 75°C)	IFSM		30 (for 1 cycle)								Amp
Operating and Storage Junction Temperature Range	TJ, Tstg		-55 to +150								°C

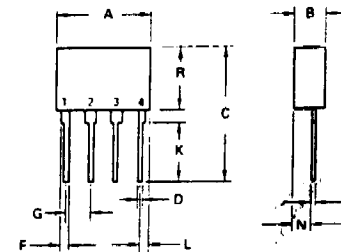
**ELECTRICAL CHARACTERISTICS**

Characteristic	Symbol	Typ	Max	Unit
Instantaneous Forward Voltage (Per Diode) (IF = 1.57 Amp, TJ = 25°C)	vF	1.15	1.3	Volts
Reverse Current (Per Diode) (Rated VR, TA = 25°C)	IR	-	10	µA

**MECHANICAL CHARACTERISTICS**

**CASE:** Transfer Moulded Plastic  
**POLARITY:** Terminal-designation on case  
Pin 1 (+) for DC output  
Pin 4 (-) for DC output  
Pins 2 and 3 (AC) for AC input

**MOUNTING POSITION:** Any  
**WEIGHT:** 1.8 grams (approx)  
**TERMINALS:** Readily solderable  
connections, corrosion resistant.



STYLE 1:  
TERM 1 POS  
2 AC  
3 AC  
4 NEG

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	14.99	15.49	0.590	0.610
B	4.57	5.08	0.180	0.200
C	-	20.57	-	0.810
D	0.76	1.02	0.030	0.040
F	1.02	1.27	0.040	0.050
G	3.68	3.94	0.145	0.155
J	0.56	0.71	0.022	0.028
K	-	9.02	-	0.355
L	1.78	2.03	0.070	0.080
N	2.54	2.79	0.100	0.110
R	9.40	10.03	0.370	0.395

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