

MDA200 series (3N253 thru 3N259)

MINIATURE INTEGRAL DIODE ASSEMBLIES

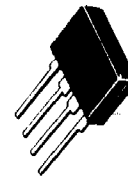
... with silicon rectifier chips interconnected and encapsulated into voidless rectifier bridge circuits.

- High Resistance to Shock and Vibration
- High Dielectric Strength
- Built-In Printed Circuit Board Stand-Offs
- UL Recognized
- $RO_{JA} = 60^{\circ}\text{C}/\text{W}$



SINGLE-PHASE FULL-WAVE BRIDGE

2.0 AMPERES
50-1000 VOLTS



Rating (Per Diode)	Symbol	3N253 MDA200	3N254 MDA201	3N255 MDA202	3N256 MDA204	3N257 MDA206	3N258 MDA208	3N259 MDA210	Unit
Peak Repetitive Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Working Peak Reverse Voltage	VRWM								
DC Blocking Voltage	V _R								
DC Output Voltage	V _{dc}	32	64	127	255	382	510	640	Volts
Resistive Load	V _{dc}	50	100	200	400	600	800	1000	Volts
Capacitive Load	V _{dc}								
Sine Wave RMS Input Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	Volts
Average Rectified Forward Current (single phase bridge operation, resistive load, 60 Hz, T _A = 55°C)	I _O	2.0							Amp
Non-Repetitive Peak Surge Current (Preceded and followed by rated current and voltage, T _A = 55°C)	I _{FSM}	60 (for 1 cycle)							Amp
Operating and Storage Junction Temperature Range	T _J , T _{stg}	-55 to +165							°C

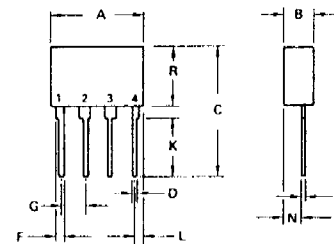
ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Typ	Max	Unit
Instantaneous Forward Voltage (Per Diode) (I _F = 3.14 Amp, T _J = 25°C)	V _F	1.0	1.1	Volts
Reverse Current (Per Diode) (Rated V _R , T _A = 25°C)	I _R	—	10	μA

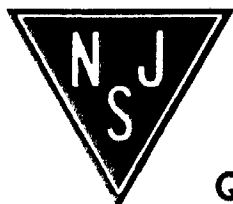
MECHANICAL CHARACTERISTICS

CASE: Transfer Molded 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.



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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