



3N246 thru 3N252 (MDA100A series)

MINIATURE INTEGRAL DIODE ASSEMBLIES

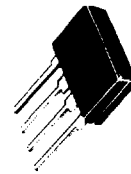
... with silicon rectifier chips interconnected and encapsulated into voidless rectifier bridge circuits.

- High Resistance to Shock and Vibration
- High Dielectric Strength
- Built-In Printed Circuit Board Stand Offs
- UL Recognized



SINGLE-PHASE FULL-WAVE BRIDGE

1.0 AMPERE
50-1000 VOLTS



3

MAXIMUM RATINGS	Rating (Per Diode)	Symbol	3N246	3N247	3N248	3N249	3N250	3N251	3N252	Unit
			MDA100A	MDA101A	MDA102A	MDA104A	MDA106A	MDA108A	MDA110A	
Peak Repetitive Reverse Voltage	V_{RRM}		50	100	200	400	600	800	1000	Volts
Working Peak Reverse Voltage	V_{RWM}									
DC Blocking Voltage	V_R									
DC Output Voltage	Resistive Load	V_{dc}	32	64	127	255	382	510	640	Volts
	Capacitive Load	V_{dc}	50	100	200	400	600	800	1000	Volts
Small 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 $T_A = 75^\circ\text{C}$)	I_O		1.0							Amp
Non-Repetitive Peak Surge Current (Preceded and followed by rated current and voltage $T_A = 75^\circ\text{C}$)	I_{FSM}		30 (for 1 cycle)							Amp
Operating and Storage Junction Temperature Range	T_J, T_{stg}		-55 to +150							$^\circ\text{C}$

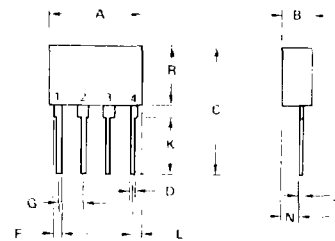
ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Typ	Max	Unit
Instantaneous Forward Voltage (Per Diode) ($I_F = 1.57$ Amp $T_J = 25^\circ\text{C}$)	v_F	1.15	1.3	Volts
Reverse Current (Per Diode) (Rated V_R , $T_A = 25^\circ\text{C}$)	I_R		10	μA

MECHANICAL CHARACTERISTICS

CASE: Transfer Moulded Plastic
POLARITY: Terminal designation on case
 (+) for DC output
 (-) for DC output
 (AC) for AC input

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



STYLE 1
 1 FERM POS
 2 AC
 3 AC
 4 NEG

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	3.93	5.49	0.590	0.670
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

CASE 312 02

3N246 thru 3N252 (MDA100A Series)

MAXIMUM RATINGS, BRIDGE OPERATION

FIGURE 1 - CURRENT DERATING

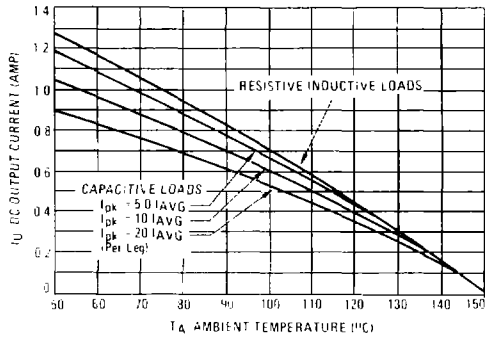


FIGURE 2 - POWER DISSIPATION

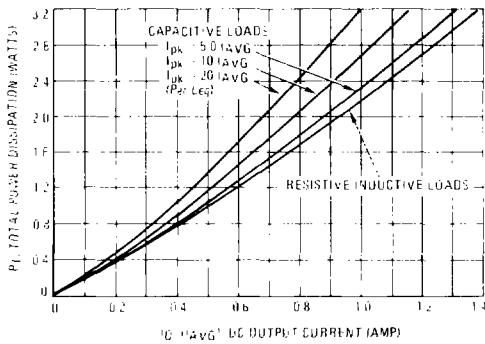
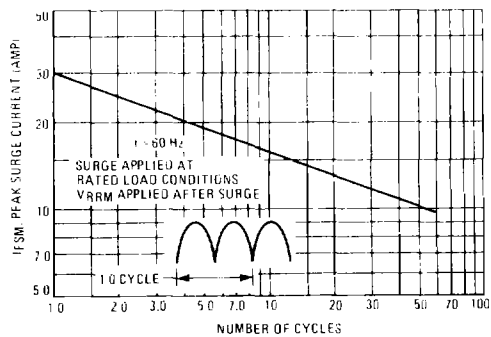


FIGURE 3 - SURGE CURRENT



SINGLE DIODE CHARACTERISTICS

FIGURE 4 - MAXIMUM FORWARD VOLTAGE

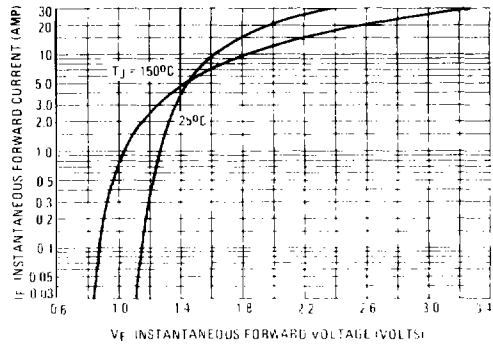


FIGURE 5 - FORWARD RECOVERY TIME

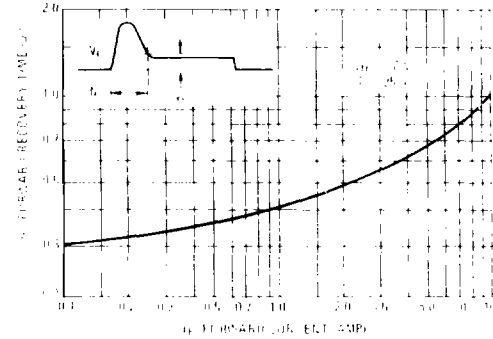
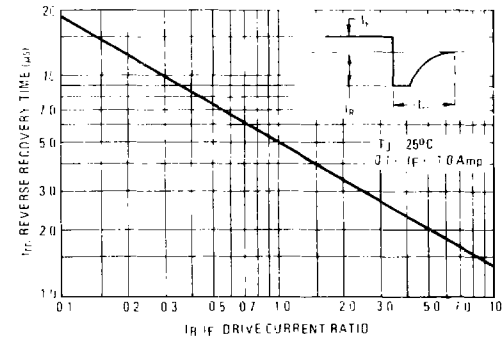


FIGURE 6 - REVERSE RECOVERY TIME



3