

HYBRID I.C.s "Hi-Net"

Diode Arrays

High-speed switching diode arrays and high voltage-withstand diode arrays are of NICHICON's standard series. They are combined to be conveniently used for both binary and decimal systems. High-speed series is ideal for computer peripherals, control boards and general electronic appliances. Besides, high voltage withstand series is ideal for plasma displays relay surge-preventive circuits.

Both of these series are in stock for prompt delivery. Any special requirements with customer's particular circuits will be also welcome. Please consult us for the details.

(Samples for the items listed below are not always available on stock, please contact our sales office for details together with your specific requirements.)

High-speed switching diode array series

Absolute maximum ratings *

Items	Symbol	Ratings
Peak reverse voltage	V_{RM}	40V
DC reverse voltage	V_R	40V
Surge current (1 μ s)	I_{FSM}	4.0A
Peak forward current	I_{FM}	300mA
Average rectified current	I_O	150mA*
Storage temperature	Tstg	-25~+85°C

* 100mA for simultaneous energizing

* Maximum Current value applicable to each diode

Electrical characteristics

Ta: +25°C

Items	Symbol	Conditions	Ratings			Unit
			Min	Typ	Max	
Reverse current	I_R	V_R 40V		0.7	1.0	μ A
Forward voltage	V_F	I_F 10mA		0.79	1.0	V
Forward voltage	V_F	I_F 50mA		0.85	1.2	V
Forward voltage	V_F	I_F 100mA		0.85	1.2	V
Reverse recovery time	t_{rr}	I_F 10mA, V_R 6V		4.0		nS

Series List

Code	Type	Number of diodes	Common electrode	Dimensions (%Max.)			No. of pins	Circuit diagram
				W	H	T		
ZHMA0423	MA423	4	Cathode	14	9	3.5	5	1
ZHMA0424	MA424	4	Anode					2
ZHMA0425	MA425	8	Cathode	24	9	3.5	9	1
ZHMA0426	MA426	8	Anode					2
ZHMA0427	MA427	10	Cathode	29	9	3.5	11	1
ZHMA0428	MA428	10	Anode					2
ZHMA0429	MA429	5	Isolated	27	9	3.5	10	3
ZHMA0430	MA430	4	Isolated	21.5	9	3.5	8	3
ZHMA0431	MA431	6	Cathode	19	9	3.5	7	1
ZHMA0432	MA432	6	Anode					2

High voltage-withstand series

Absolute maximum ratings *

Items	Symbol	Ratings
Peak reverse voltage	V_{RM}	220V
Reverse DC voltage	V_R	200V
Surge current (1sec.)	I_S	1A
Peak forward current	I_{FM}	600mA
Average rectified current	I_O	200mA
Storage temperature	Tstg	-25~+85°C

* Maximum Current value applicable to each diode

Electrical characteristics

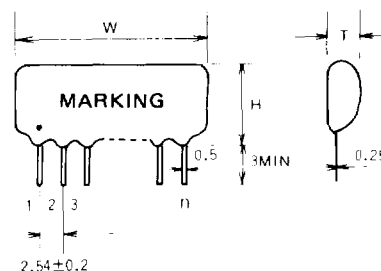
Ta: +25°C

Items	Symbol	Conditions	Ratings			Unit
			Min	Typ	Max	
Reverse current	I_R	V_R 110V			1.0	μ A
Forward voltage	V_F	I_F 50mA			1.3	V
Reverse voltage	V_R	I_R 100 μ A	220			V
Time required for recovery from reverse voltage or current	t_{rr}	I_F 30mA, R_L 100 Ω			100	ns

Series List

Code	Type	Number of diodes	Common electrode	Dimensions (%Max.)			No. of pins	Circuit diagram
				W	H	T		
ZHLA0650	HD-4K	4	Cathode	14	9	3	5	1
ZHLA0651	HD-4A	4	Anode					2
ZHLA0652	HD-8K	8	Cathode	24	9	3	9	1
ZHLA0653	HD-8A	8	Anode					2
ZHLA0654	HD-10K	10	Cathode	29	9	3	11	1
ZHLA0655	HD-10A	10	Anode					2
ZHLA0656	HD-4S	4	Isolated	21.5	9	3	8	3
ZHLA0657	HD-5S	5	Isolated	27	9	3	10	3

Drawing



- Epoxy-resin coating
- Iron lead frame tin-plated over copper

RD Arrays

Series List

Code	Type	Common electrode	No. of elements		Specifications			Dimensions (%Max.)			No. of pins	Circuit diagram
			Resistor	Diode	Resistance	Tol.	Loss (R)	W	H	T		
ZHMA2401	MA2401	Anode	8	8	330 Ω	$\pm 5\%$	60mW	24.5	7	4	9	
ZHMA2402	MA2402	Anode	8	8	1k Ω	$\pm 5\%$	60mW	24.5	7	4	9	