

# RJ45, 2x2 Multi Port, 10/100/1G Base-T Magnetics Module

ARJM22 Series

Request Samples



Check Inventory



31.2 x 28.4 x 25.8 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Features

- IEEE 802.3 compliant and UL certified
- High performance integrated magnetics for EMI suppression
- Suitable for CAT5 and CAT6 UTP cabling
- RoHS peak wave solder temperature rating 265°C
- Extended operating temperature -40 to 85°C option

## Applications

- Multiport 10/100/1G Base-T LAN
- Network Interface Cards
- High Density Data Center Switches
- NAS / Expander storage
- Data Center Servers, Routers
- Media converters

## Electrical Specifications

Parameters	Minimum	Typical	Maximum	Units	Notes
Turn Ratio ( $\pm 3\%$ )	1CT:1CT				100kHz, 0.1V
Inductance	350			$\mu\text{H}$	100kHz, 0.1V, 8mADC
Hipot	1500			Vrms	1mA Max Complies with IEEE 802.3
Operating Temperature	-40		+85	°C	See options
Storage Temperature	-40		+85	°C	
<b>100 Base-T</b>					
Insertion Loss	-1.0			dB	1-65MHz
Return Loss			-20	dB	1-10MHz
			-16		10-30MHz
			-12		30-60MHz
			-10		60-100MHz
Crosstalk			-40	dB	1-30MHz
			-35		30-60MHz
			-30		60-100MHz
CMRR			-30	dB	1-50MHz
			-20		50-100MHz
<b>1000 Base-T</b>					
Insertion Loss	-1.1			dB	0.5-100MHz
Return Loss			-18	dB	0.5-40MHz
			$-12+20\log(f/80)^\dagger$		40.1-100MHz
Crosstalk			-35	dB	0.5-40MHz
			$-33+20\log(f/50)^\dagger$		40.1-100MHz
CMRR			-30	dB	0.5-100MHz

$\dagger$  f represents the test frequency specified in MHz

ARJM24 Series is RoHS/RoHS II Compliant

MSL level: 1

UL Certification Number: E503350



5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
For terms and conditions of sales, please visit:  
www.abracon.com

REVISED: 01-21-21

ABRACON IS  
ISO9001-2015  
CERTIFIED

# RJ45, 2x2 Multi Port, 10/100/1G Base-T Magnetics Module

ARJM22 Series

Request Samples

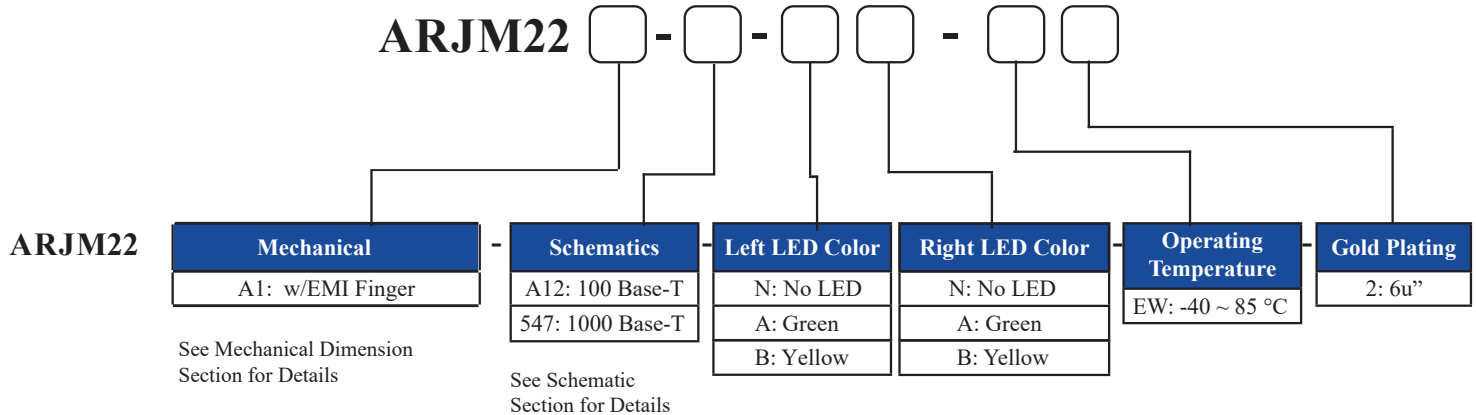


Check Inventory



31.2 x 28.4 x 25.8 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Part Number Identification



## Available Part Numbers

Part Number	Speed	Tab Direction	LED (Left:Right)	Operating Temperature	Solder Method	Gold Plating
ARJM22A1-547-AB-EW2	1000 Base-T	Up/Down	G : Y	-40°C ~ 85°C	Wave	6µ"
ARJM22A1-547-NN-EW2	1000 Base-T	Up/Down	none	-40°C ~ 85°C	Wave	6µ"
ARJM22A1-A12-BA-EW2	10/100 Base-T	Up/Down	Y : G	-40°C ~ 85°C	Wave	6µ"

# RJ45, 2x2 Multi Port, 10/100/1G Base-T Magnetics Module

ARJM22 Series

Request Samples



Check Inventory



31.2 x 28.4 x 25.8 mm

RoHS/RoHS II Compliant

MSL Level = 1

## Materials

---

**1. Housing:**

Material:  
PBT, UL94V-0  
Standard Color: Black

**2. Contact Pin:**

Material: Phosphor Bronze  
Plating (1): Nickel  
Plating (2): 100%Sn

**3. Insert:**

Material:  
PBT, UL94V-0

Contact Material: Phosphor Bronze  
Plating (1): Nickel  
Plating (2): Gold, 6u"

**4. LED:**

Material: Diffused Epoxy Lens, 0.5x0.5mm  
Carbon Steel wireframe leads

**5. Metal Shell:**

Material: Brass  
Plating (1): Nickel

**Note: Abracon LLC will not alter any material composition, without prior written notification.**



5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 01-21-21

ABRACON IS  
ISO9001-2015  
CERTIFIED

# RJ45, 2x2 Multi Port, 10/100/1G Base-T Magnetics Module

ARJM22 Series

Request Samples



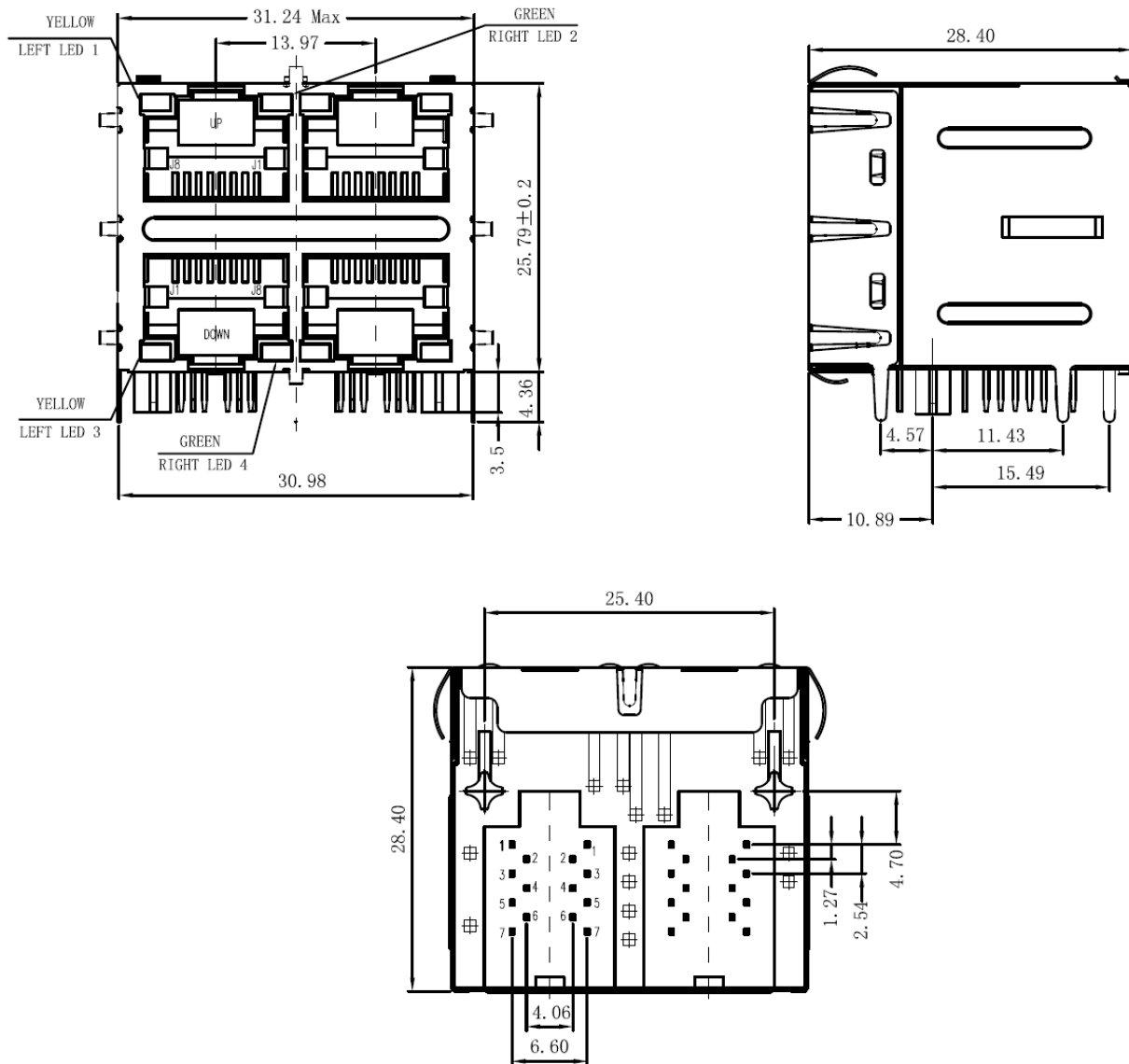
Check Inventory



31.2 x 28.4 x 25.8 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Mechanical Specifications

A1: 2 x 2, w/ EMI Fingers



Dimensions are in mm. Unless otherwise noted, tolerance is  $\pm 0.25\text{mm}$



5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 01-21-21

ABRACON IS  
ISO9001-2015  
CERTIFIED

# RJ45, 2x2 Multi Port, 10/100/1G Base-T Magnetics Module

ARJM22 Series

Request Samples



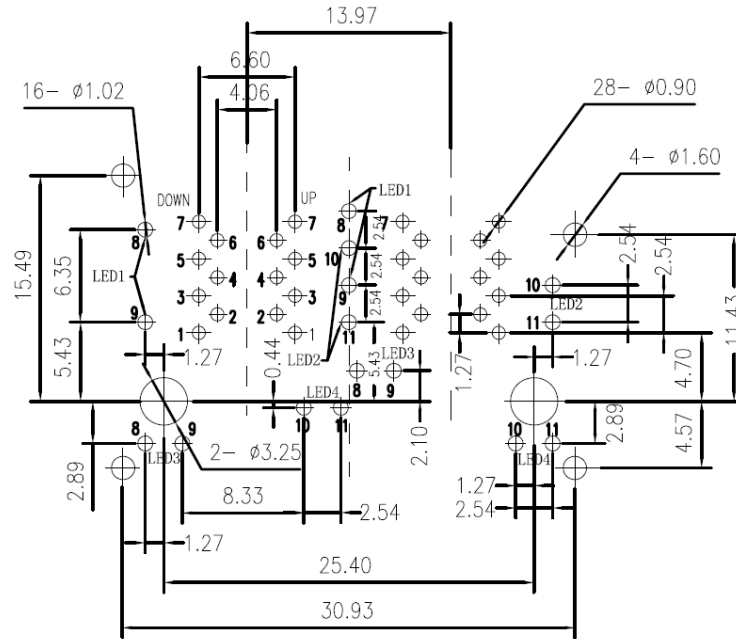
Check Inventory



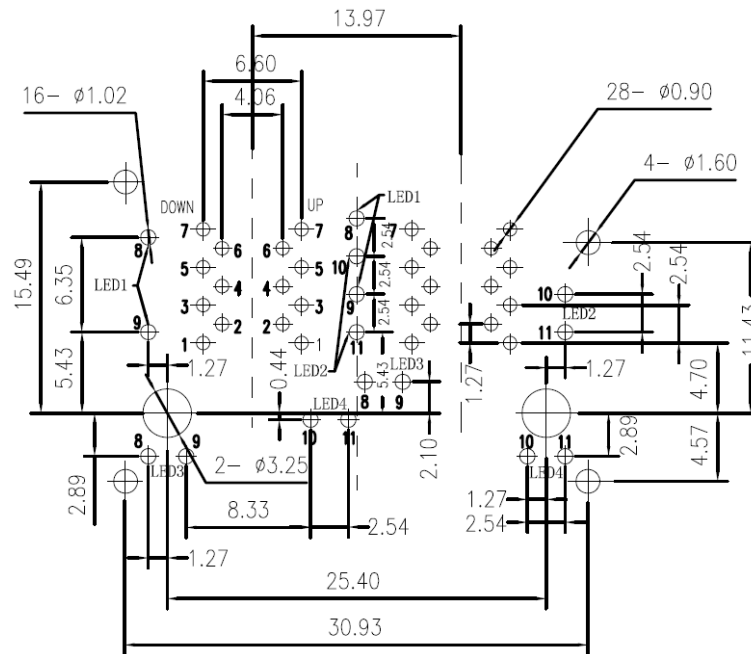
31.2 x 28.4 x 25.8 mm  
 RoHS/RoHS II Compliant  
 MSL Level = 1

## Recommended Layout

### 10/100 Base-T



### 1000 Base-T



Dimensions are in mm. Unless otherwise noted, tolerance is  $\pm 0.25$ mm. Devices without LEDs (N option) do not require through holes at locations labeled LED1, LED2, LED3 and LED4.



5101 Hidden Creek Ln Spicewood TX 78669  
 Phone: 512-371-6159 | Fax: 512-351-8858  
 For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 01-21-21

ABRACON IS  
 ISO9001-2015  
 CERTIFIED

# RJ45, 2x2 Multi Port, 10/100/1G Base-T Magnetics Module

ARJM22 Series

Request Samples



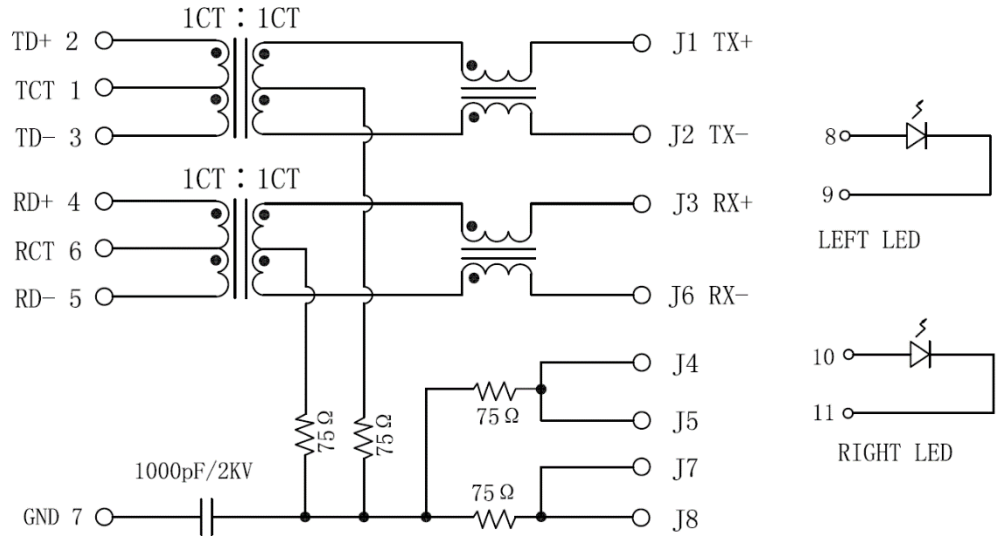
Check Inventory



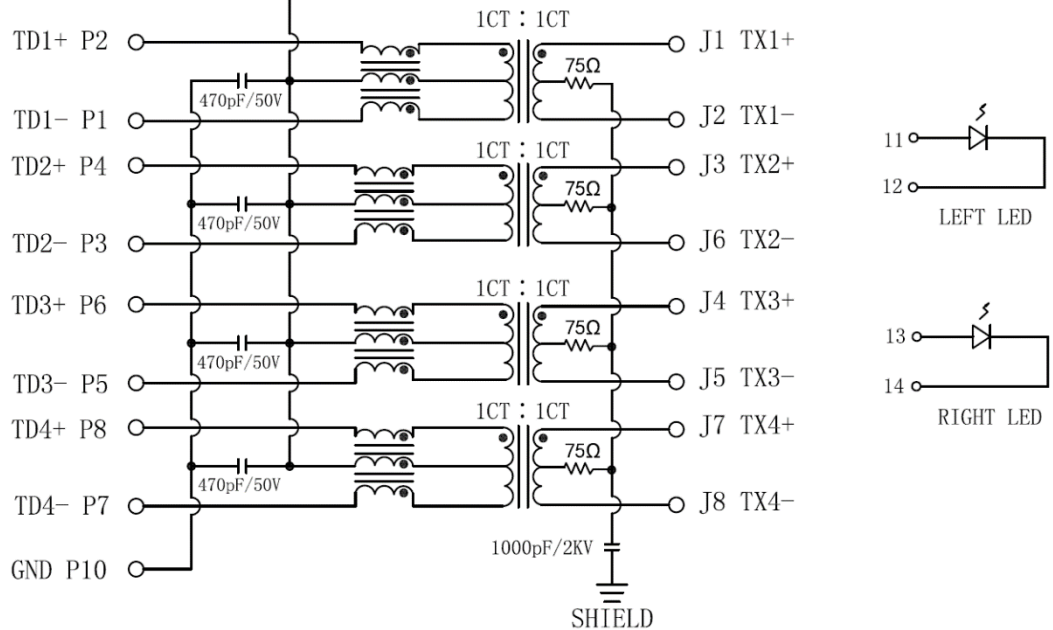
31.2 x 28.4 x 25.8 mm  
 RoHS/RoHS II Compliant  
 MSL Level = 1

## Schematic

A12 (10/100 Base-T)



547 (1000 Base-T)



5101 Hidden Creek Ln Spicewood TX 78669  
 Phone: 512-371-6159 | Fax: 512-351-8858  
 For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 01-21-21

ABRACON IS  
 ISO9001-2015  
 CERTIFIED

# RJ45, 2x2 Multi Port, 10/100/1G Base-T Magnetics Module

ARJM22 Series

Request Samples



Check Inventory



31.2 x 28.4 x 25.8 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## LED SPECIFICATION. @20mA Forward Current

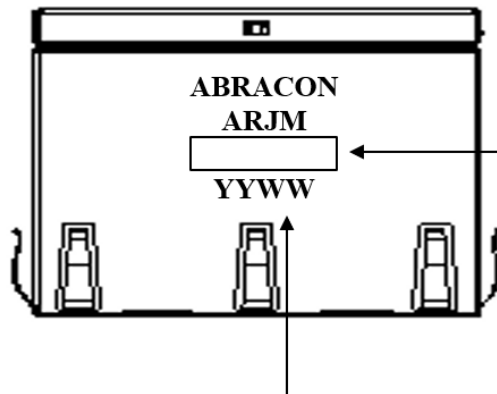
AB option (Left: Green – Right: Yellow)

BA option (Left: Yellow – Right: Green)

Color	Green	Yellow
Wavelength	565nm Typ	585nm Typ
Forward Voltage	2.2V Typ	2.1V Typ

NN option (no LEDs)

## Part Marking



Part number

XXXX-XXX-XX-XXX

e.g. 22A1-A12-AB-EW2

YY: Year: E.g. 21 for 2021

WW: Week: E.g. 05 for  
the 5<sup>th</sup> week of the year.

Marking Method = Laser Marking



5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 01-21-21

ABRACON IS  
ISO9001-2015  
CERTIFIED

# RJ45, 2x2 Multi Port, 10/100/1G Base-T Magnetics Module

ARJM22 Series

Request Samples



Check Inventory

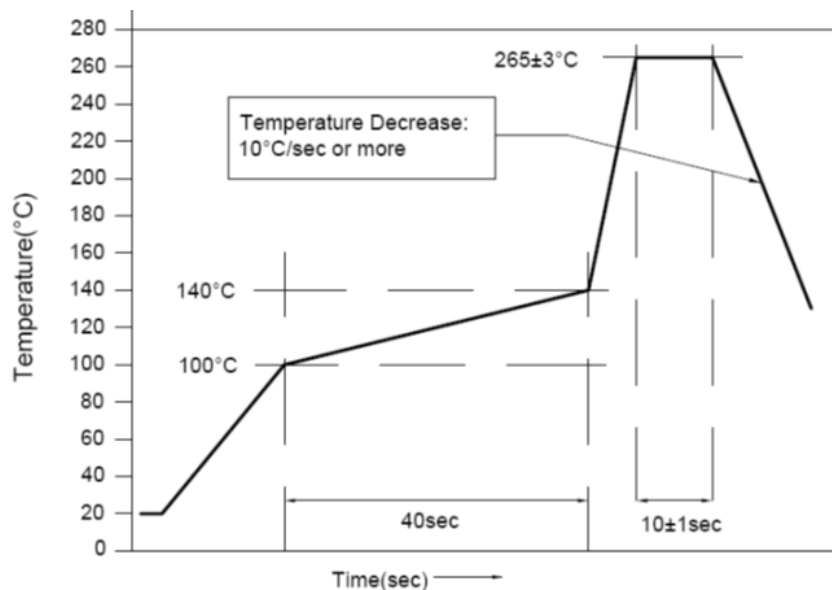


31.2 x 28.4 x 25.8 mm

RoHS/RoHS II Compliant

MSL Level = 1

## Wave Profile



## Packaging

Series	Approximate Weight / Pc	Approximate Weight / Carton	Qty / Carton (pcs)	Tray / Carton	MOQ (pcs)	Carton Dimensions (LxWxH)
ARJM22A	20.40 g	5688 g	224	8	224	340 x 215 x 275 mm

**ATTENTION:** Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



5101 Hidden Creek Ln Spicewood TX 78669  
 Phone: 512-371-6159 | Fax: 512-351-8858  
 For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 01-21-21

ABRACON IS  
 ISO9001-2015  
 CERTIFIED



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Modular Connectors / Ethernet Connectors](#) category:*

*Click to view products by [Abracon](#) manufacturer:*

Other Similar products are found below :

[8949-H88/06BLKA/SN](#) [74441-0010/BKN](#) [MP1010RX-1000](#) [MP44RX-1000](#) [PHP-6P6C-5](#) [GAX-3-66](#) [GAX-8-62](#) [GDCX-PA-66-50](#) [GDCX-PN-64](#) [GDCX-PN-66](#) [GDCX-PN-66-50](#) [GDLX-A-66](#) [GDLX-N-66](#) [GDLX-S-66](#) [GDLX-S-88K](#) [GDTX-S-88-50](#) [GDX-PA-1010](#) [GLX-N-1010M-BLK](#) [GLX-S-88M-BLK](#) [GMX-N-1010](#) [GMX-S-1010](#) [GMX-S-66](#) [GMX-SMT4-N-88](#) [GPX-2-64](#) [GSGX-N-2-88](#) [GSGX-N-4-88](#) [GSX-NS2-88-3.05](#) [GSX-NS2-88-3.05-50](#) [GSX-NS-88-3.05-50](#) [PT-108A-8C-UL](#) [PT-J951-8C](#) [PTS-J531-8CS-50UL](#) [1-1775629-2](#) [A-2014-0-4](#) [GWLX-S-88-GR](#) [GWLX-S9-88-YG](#) [DC-1021-8-WH-6](#) [1300530003](#) [1324640-4](#) [RJ11FTVC2G](#) [RJ11FTVC2N](#) [RJFTVX2SA1G](#) [132764-001](#) [1413235](#) [MP88X-1000](#) [MPS88RX-5000](#) [E5288-S000K3-L](#) [E5908-15A242-L](#) [155302-001](#) [AX100653](#)