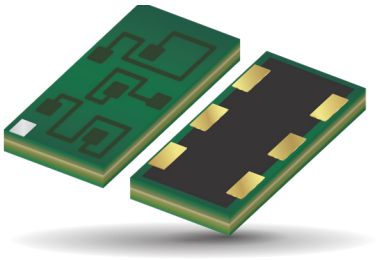
Multilayer Organic (MLO®) Diplexers

0805 CDMA



MLO® TECHNOLOGY

The 0603 diplexer is a best in class low profile multilayer organic passive device that is based on KYOCERA AVX patented multilayer organic high density interconnect technology. The MLO™ diplexer uses high dielectric constant and low loss materials to realize high Q passive printed elements such as inductors, and capacitors in a multilayer stack up. The MLO™ diplexers can support multiple wireless standards such as WCDMA, CDMA, WLAN, GSM, and BT. These diplexers are less than 0.5mm in height and are ideally suited for band switching for dual band systems. All diplexers are expansion matched to printed circuit boards thereby resulting in improved reliability vs. ceramic and Si components.

APPLICATIONS

Multiband applications including WCDMA, WLAN, WiMax, GPS, and cellular bands

LAND GRID ARRAY ADVANTAGES

- Low Insertion Loss
- Excellent Solderability
- Low Parasitics
- Low Profile

HOW TO ORDER

DP	05	A	1920	7	TR
Type	Size	Design	Frequency (MHz)	Finish	Packaging
				7 = Au T = NiSn	Tape & Reel TR = 3 Kpcs TR/500 = 500 pcs

RoHS COMPLIANT

QUALITY INSPECTION

Finished parts are 100% tested for electrical parameters and visual characteristics.

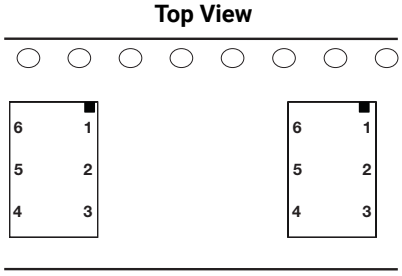
OPERATING TEMPERATURE

-40°C to +85°C

TERMINATION

Finishes available in Ni Au, Ni Sn and OSP coatings which are compatible with automatic soldering technologies which include reflow, wave soldering, vapor phase and manual.

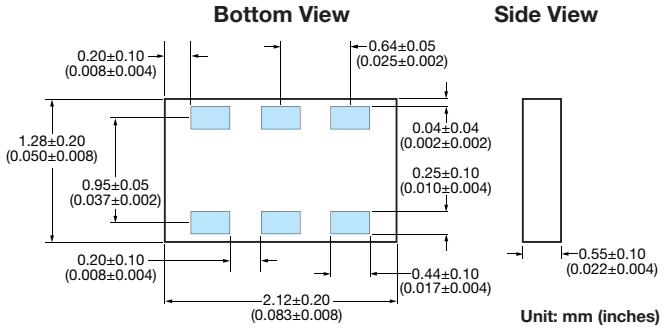
ORIENTATION IN TAPE



POWER CAPACITY

4.5W Maximum

COMPONENT DIMENSIONS AND FUNCTIONS

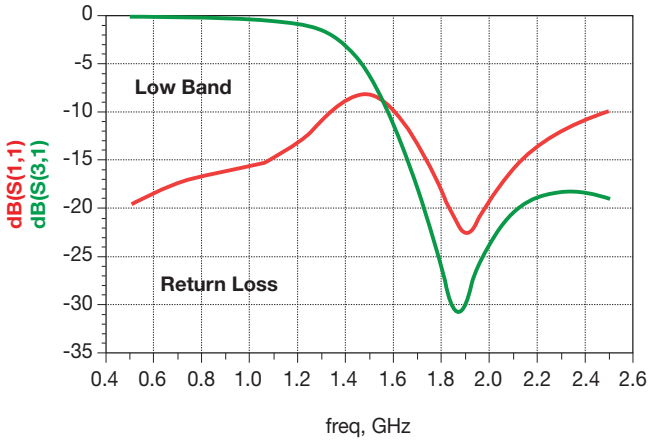


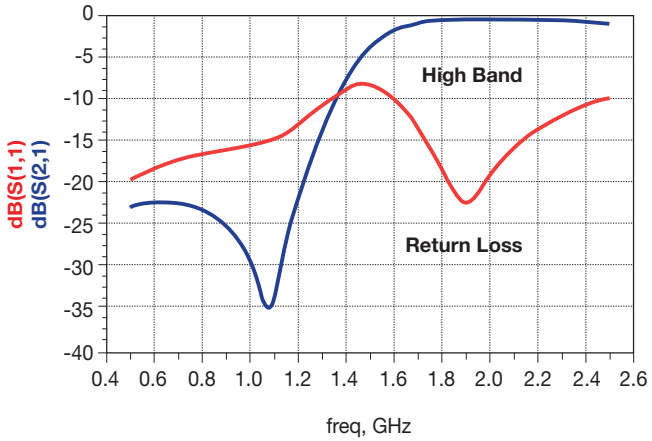
Terminal No.	Terminal Name
1	High Frequency Port
2	GND
3	Low Frequency Port
4	GND
5	Common Port
6	GND

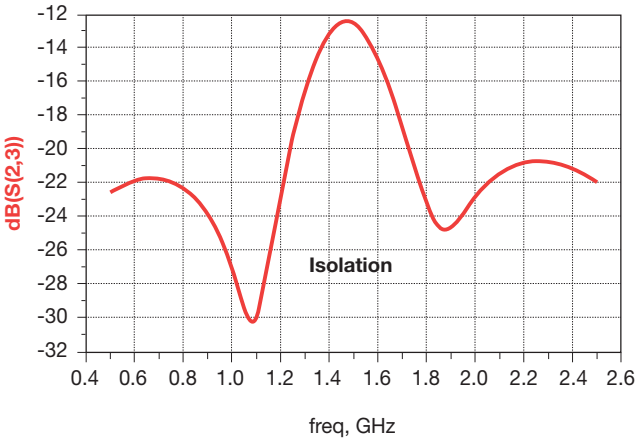
PART NUMBER: DP05A19207TR

Specification @ 25°C	
Size [mm(inches)]	2.12 x 1.28 (0.083 x 0.050)
Height [mm(inches)]	0.55 (0.021)
Volume (mm^3)	1.5
Frequency Range (F1) (MHz)	859±35
Frequency Range (F2) (MHz)	1920±70
Insertion Loss (F1, at Fc) (dB)	-0.4
Insertion Loss (F2, at Fc) (dB)	-0.6
Attenuation (F1) at (F2) (dB)	-23
Attenuation (F2) at (F1) (dB)	-23
VSWR (Input @ F1)	1.4
VSWR (Input @ F2)	1.3
VSWR (Lowband @ F1)	1.4
VSWR (Highband @ F2)	1.4

S PARAMETER MEASUREMENTS







Note: Measurements were taken using an Anritsu 4 port VNA; Diplexer was mounted on a custom evaluation board. To reduce systematic errors from the VNA, the coaxial measurement cables, and evaluation board, a Short-Open-Load-Thru (SOLT) calibration was performed, using a custom fabricated calibration substrate. This is the most common coaxial calibration methods.