

DC Pass

NON-CATALOG Power Splitter/Combiner

2 Way-0° 50Ω 7000 to 8600 MHz

IZY2PD-86+
IZY2PD-86


CASE STYLE: JJJ245

Connectors Model
SMA IZY2PD-86(+)
BRACKET (OPTION "B")

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Maximum Ratings

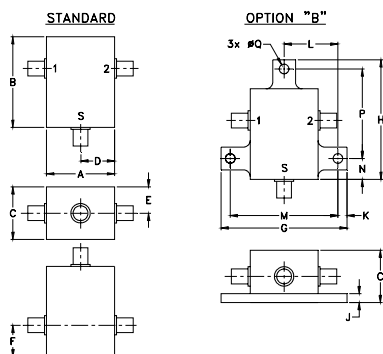
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

DC Current 1.0 A (500mA for each port)
 Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	
0.75	1.00	0.58	0.38	0.29	0.35	1.39	1.32	
19.05	25.4	14.732	9.65	7.37	8.89	35.31	33.53	
J	K	L	M	N	P	Q		wt
0.10	0.10	0.595	1.19	0.23	0.995	0.106	grams	
2.54	2.54	15.11	30.23	5.84	25.27	2.69		22.0

Features

- low insertion loss, 0.1 dB typ.
- high isolation, 30 dB typ.
- excellent input & output VSWR, 1.1:1 typ.
- excellent amplitude unbalance, 0.1 dB typ.
- rugged shielded case

Applications

- SHF
- defense communications
- instrumentation

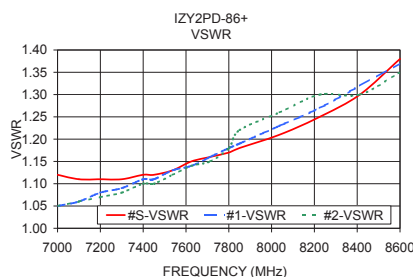
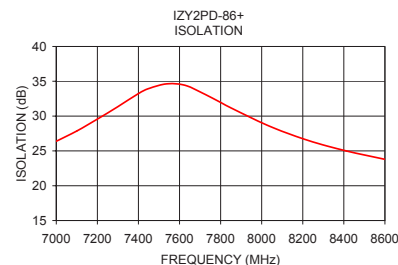
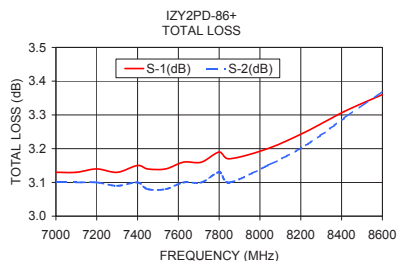
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)			
	Typ.	Min.	Typ.	Max.			S	OUT		
f_L - f_U					Max.	Max.	Typ.	Max.	Typ.	Max.
7000-8600	30	18	0.1	0.5	6	0.25	1.1	1.45	1.1	1.4

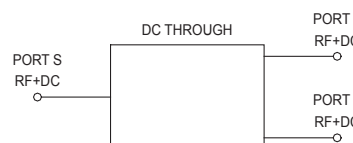
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2					
7000.00	3.13	3.10	0.03	26.38	1.12	1.05	1.05
7099.90	3.13	3.10	0.03	27.86	1.11	1.06	1.06
7199.80	3.14	3.10	0.04	29.56	1.11	1.08	1.07
7299.70	3.13	3.09	0.04	31.35	1.11	1.09	1.08
7399.60	3.15	3.10	0.05	33.23	1.12	1.11	1.10
7450.00	3.14	3.08	0.06	33.95	1.12	1.11	1.10
7537.60	3.14	3.08	0.06	34.63	1.13	1.13	1.12
7625.20	3.16	3.10	0.06	34.44	1.15	1.14	1.14
7712.80	3.16	3.10	0.06	33.29	1.16	1.16	1.15
7800.40	3.19	3.13	0.06	31.96	1.17	1.18	1.18
7850.00	3.17	3.10	0.06	31.18	1.18	1.19	1.22
8037.50	3.20	3.15	0.05	28.55	1.21	1.23	1.26
8225.00	3.25	3.21	0.04	26.52	1.25	1.27	1.30
8412.50	3.31	3.29	0.02	24.99	1.30	1.32	1.30
8600.00	3.36	3.37	0.01	23.79	1.38	1.37	1.35

1. Total Loss = Insertion Loss + 3dB splitter loss.



electrical schematic



Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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REV. F
 M160892
 IZY2PD-86
 HY/TD/CP/AM
 180206

2 Way-0° Power Splitter/Combiner

IZY2PD-86+

Typical Performance Data

FREQ. (MHz)	TOTAL LOSS ¹ (dB)		AMP. UNBAL. (dB)	ISOLATION (dB)	FREQ. (MHz)	VSWR (:1)		
	S-1	S-2				S	1	2
7000.0	3.13	3.10	0.03	26.38	7000.0	1.12	1.05	1.05
7099.9	3.13	3.10	0.03	27.86	7099.9	1.11	1.06	1.06
7199.8	3.14	3.10	0.04	29.56	7199.8	1.11	1.08	1.07
7299.7	3.13	3.09	0.04	31.35	7299.7	1.11	1.09	1.08
7399.6	3.15	3.10	0.05	33.23	7399.6	1.12	1.11	1.10
7450.0	3.14	3.08	0.06	33.95	7450.0	1.12	1.11	1.10
7537.6	3.14	3.08	0.06	34.63	7537.6	1.13	1.13	1.12
7625.2	3.16	3.10	0.06	34.44	7625.2	1.15	1.14	1.14
7712.8	3.16	3.10	0.06	33.29	7712.8	1.16	1.16	1.15
7800.4	3.19	3.13	0.06	31.96	7800.4	1.17	1.18	1.18
7850.0	3.17	3.10	0.06	31.18	7850.0	1.18	1.19	1.22
8037.5	3.20	3.15	0.05	28.55	8037.5	1.21	1.23	1.26
8225.0	3.25	3.21	0.04	26.52	8225.0	1.25	1.27	1.30
8412.5	3.31	3.29	0.02	24.99	8412.5	1.30	1.32	1.30
8600.0	3.36	3.37	0.01	23.79	8600.0	1.38	1.37	1.35

¹Total Loss = Insertion Loss + 3dB Splitter Loss

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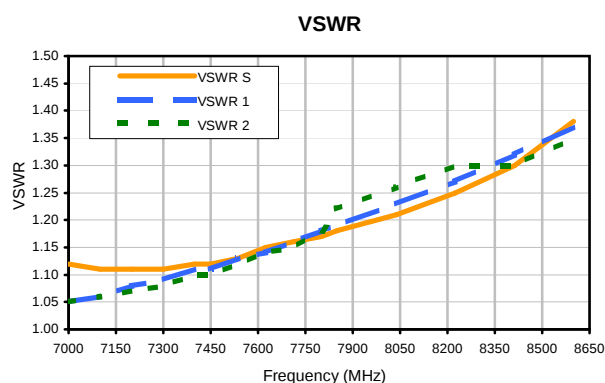
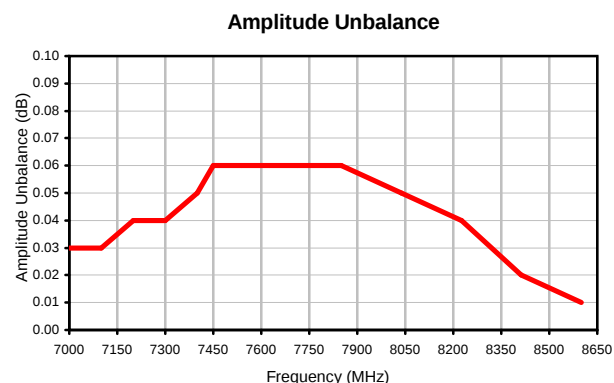
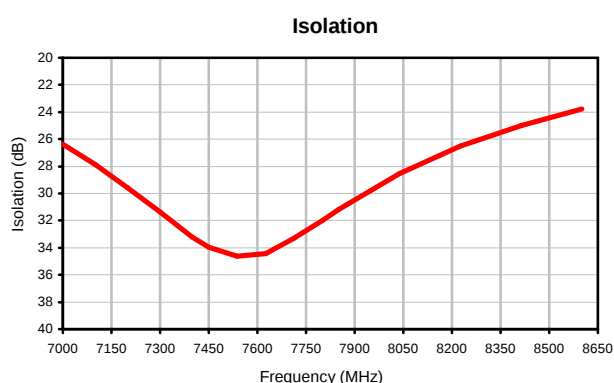
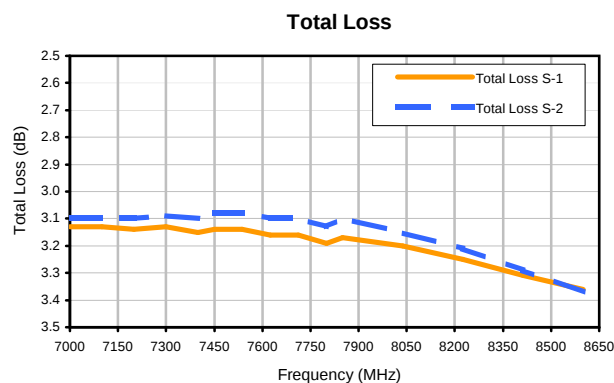
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IZY2PD-86+

Typical Performance Curves



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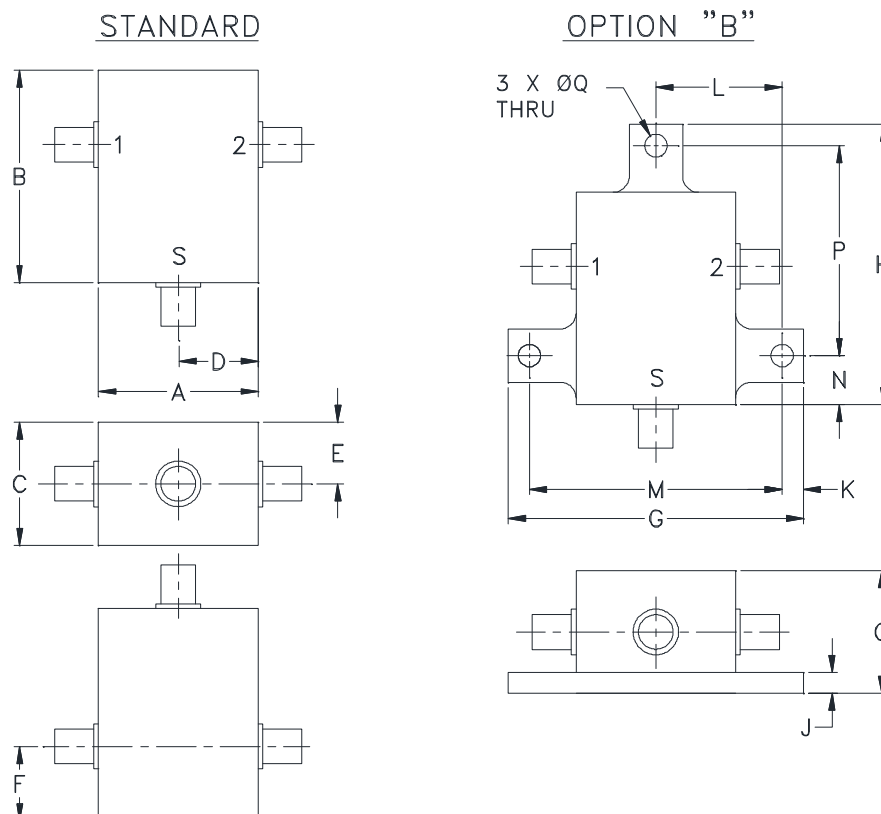
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Outline Dimensions



CASE#	A	B	C	D	E	F	G	H	J	K	L
JJJ245	.75 (19.05)	1.00 (25.40)	.58 (14.73)	.38 (9.65)	.29 (7.37)	.35 (8.89)	1.39 (35.31)	1.32 (33.53)	.10 (2.54)	.10 (2.54)	.595 (15.11)

CASE#	M	N	P	Q	WT. GRAM
JJJ245	1.190 (30.23)	.23 (5.84)	.995 (25.27)	.106 (2.69)	22.0

Dimensions are in inches (mm). Tolerances: 2 Pl. $\pm .03$; 3 Pl. $\pm .015$

Notes:

- Case material: Aluminum alloy.
- Case finish:
For RoHS Case Styles: Clear chemical conversion coating, non-chrome or trivalent chrome based.
- Mounting bracket available upon request. Add suffix B to part number.



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All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I