NON-CATALOG

DC Pass

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

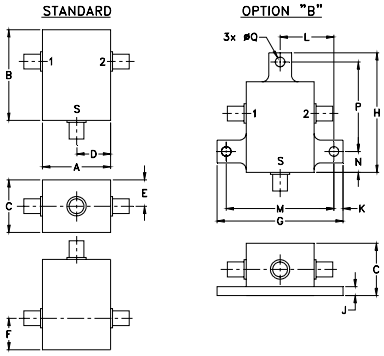
Features

- 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

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

Electrical Specifications

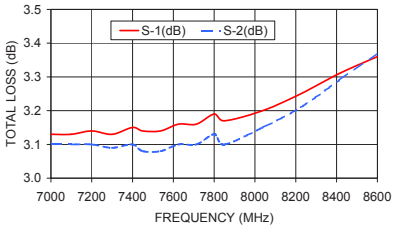
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)			
							S		OUT	
f_L-f_U	Typ.	Min.	Typ.	Max.	Max.	Max.	Typ.	Max.	Typ.	Max.
7000-8600	30	18	0.1	0.5	6	0.25	1.1	1.45	1.1	1.4

Typical Performance Data

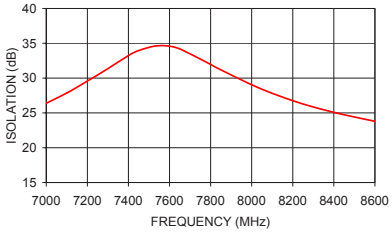
Frequency (MHz)	Total Loss[1] (dB)		Amplitude Unbalance (dB)	Isolation (dB)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2					
7000.00	3.13	3.10	0.03	26.38	1.12	1.05	1.05
7099.90	3.13	3.10	0.03	27.86	1.11	1.06	1.06
7199.80	3.14	3.10	0.04	29.56	1.11	1.08	1.07
7299.70	3.13	3.09	0.04	31.35	1.11	1.09	1.08
7399.60	3.15	3.10	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.

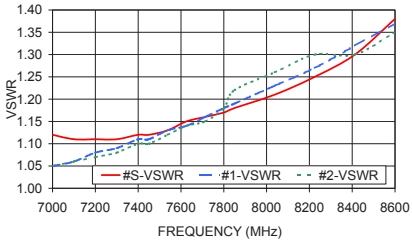
IZY2PD-86+
TOTAL LOSS



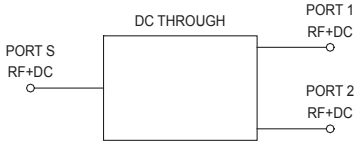
IZY2PD-86+
ISOLATION



IZY2PD-86+
VSWR



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.

C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

2 Way-0° Power Splitter/Combiner IZY2PD-86+

Typical Performance Data

FREQ. (MHz)	TOTAL LOSS[1] (dB)		AMP. UNBAL. (dB)	ISOLATION (dB)
	S-1	S-2		
7000.0	3.13	3.10	0.03	26.38
7099.9	3.13	3.10	0.03	27.86
7199.8	3.14	3.10	0.04	29.56
7299.7	3.13	3.09	0.04	31.35
7399.6	3.15	3.10	0.05	33.23
7450.0	3.14	3.08	0.06	33.95
7537.6	3.14	3.08	0.06	34.63
7625.2	3.16	3.10	0.06	34.44
7712.8	3.16	3.10	0.06	33.29
7800.4	3.19	3.13	0.06	31.96
7850.0	3.17	3.10	0.06	31.18
8037.5	3.20	3.15	0.05	28.55
8225.0	3.25	3.21	0.04	26.52
8412.5	3.31	3.29	0.02	24.99
8600.0	3.36	3.37	0.01	23.79

FREQ. (MHz)	VSWR (:1)		
	S	1	2
7000.0	1.12	1.05	1.05
7099.9	1.11	1.06	1.06
7199.8	1.11	1.08	1.07
7299.7	1.11	1.09	1.08
7399.6	1.12	1.11	1.10
7450.0	1.12	1.11	1.10
7537.6	1.13	1.13	1.12
7625.2	1.15	1.14	1.14
7712.8	1.16	1.16	1.15
7800.4	1.17	1.18	1.18
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8037.5	1.21	1.23	1.26
8225.0	1.25	1.27	1.30
8412.5	1.30	1.32	1.30
8600.0	1.38	1.37	1.35

[1]Total Loss = Insertion Loss + 3dB Splitter Loss

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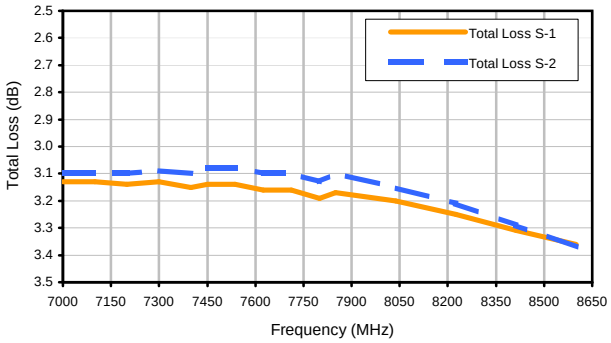
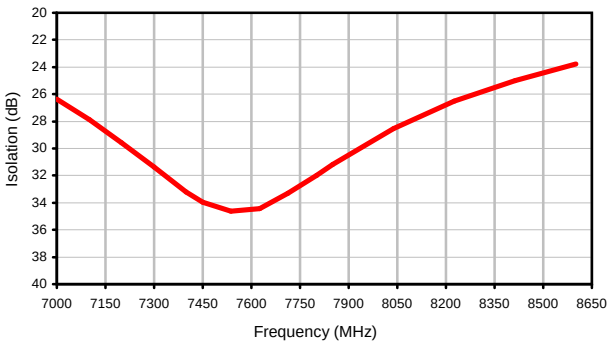
Typical Performance Curves

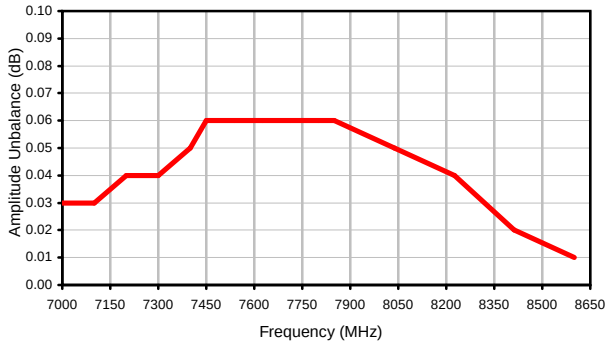
Total Loss



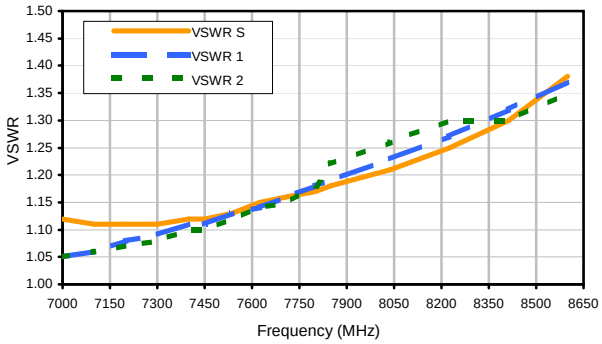
Isolation



Amplitude Unbalance



VSWR



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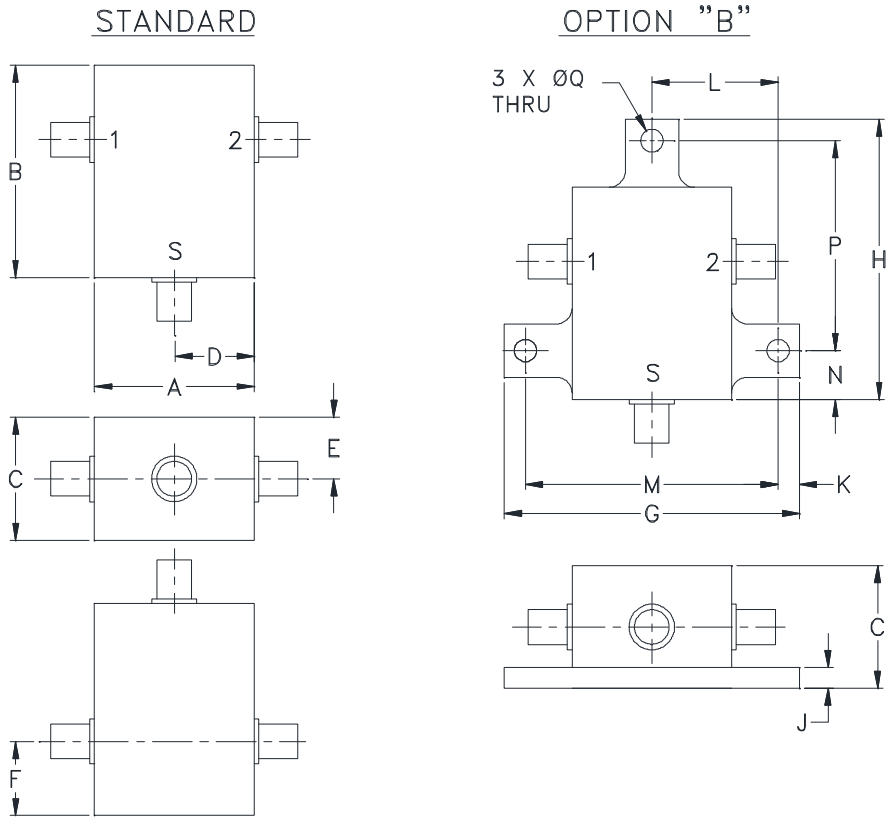
Case Style JJJ

JJJ245

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. ± .03; 3 Pl. ± .015

Notes:

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

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