

Coaxial Bias-Tee

50Ω Wideband 300 to 3500 MHz

Maximum Ratings

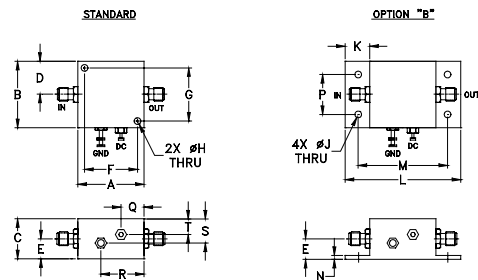
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	30 dBm max.
Voltage at DC port	30V max.
Input Current	4A
DC resistance from DC to RF&DC port	0.11 ohm typ.

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

RF	in (SMA female)
RF&DC	out (SMA male)
DC	(feed-through pin)
GROUND	GROUND

Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J	K
1.25	1.25	.75	.63	.36	1.000	1.000	.125	.125	.46
31.75	31.75	19.05	16.00	9.14	25.40	25.40	3.18	3.18	11.68
L	M	N	P	Q	R	S	T	wt.	
2.18	1.688	.06	.750	.50	.80	.45	.29		
55.37	42.88	1.524	19.05	12.7	20.32	11.43	7.366	grams	38

Features

- wideband, 300 to 3500 MHz
- low insertion loss, 0.5 dB typ.
- high DC current, 4A
- feed through terminal per DC port
- good return loss

Applications

- biasing amplifiers
- biasing of laser diodes
- biasing of active antennas
- DC return
- DC blocking
- test accessory

Bias-Tee Electrical Specifications

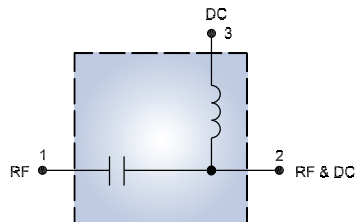
FREQUENCY (MHz)		INSERTION LOSS (dB)		ISOLATION (RF port to DC port) (RF&DC port to DC port)		VSWR* (:1)	
f_L	f_U	Typ.	Max.	Typ.	Min.	Typ.	Max.
300	700	0.4	0.9	18	15	1.13	1.4
700	3500	0.5	1.1	23	19	1.10	1.4

*VSWR measured with open and short at DC port.

Typical Performance Data

Freq. (MHz)	PIN (dBm)	INSERTION LOSS (dB)		ISOLATION (dB) DC-RF&DC	VSWR (:1)
		0A	4A		
300.00	-8.74	0.53	0.59	17.67	1.14
450.00	-8.90	0.54	0.55	19.46	1.12
600.00	-8.81	0.44	0.39	20.53	1.11
700.00	-8.72	0.41	0.35	21.08	1.09
800.00	-8.86	0.60	0.76	21.50	1.09
1000.00	-8.89	0.53	0.49	22.45	1.10
1100.00	-8.97	0.59	0.54	22.94	1.06
1400.00	-9.15	0.46	0.41	24.22	1.08
1500.00	-9.14	0.45	0.40	24.73	1.09
1800.00	-8.85	0.49	0.44	25.97	1.10
1900.00	-8.90	0.50	0.45	26.45	1.10
2100.00	-9.02	0.52	0.47	27.30	1.09
2200.00	-9.11	0.50	0.44	27.68	1.10
2400.00	-9.19	0.52	0.44	27.99	1.09
2500.00	-9.20	0.50	0.45	28.42	1.09
2600.00	-9.27	0.52	0.47	28.46	1.08
2800.00	-9.40	0.56	0.55	28.20	1.06
3000.00	-9.48	0.63	0.63	27.73	1.04
3200.00	-9.50	0.72	0.67	27.24	1.04
3500.00	-9.58	0.82	0.77	26.95	1.12

Electrical Schematic



Notes

- 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.
- 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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ZFBT-352-FT+



Generic photo used for illustration purposes only

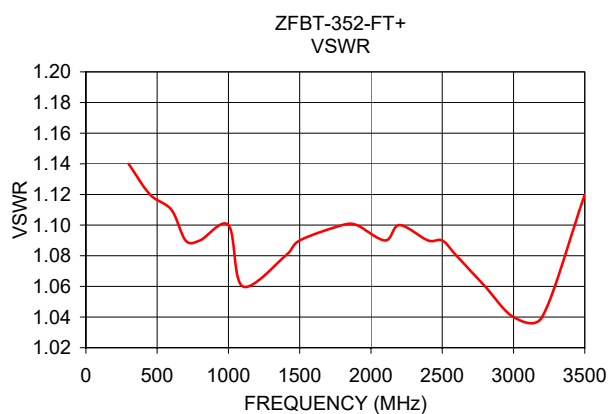
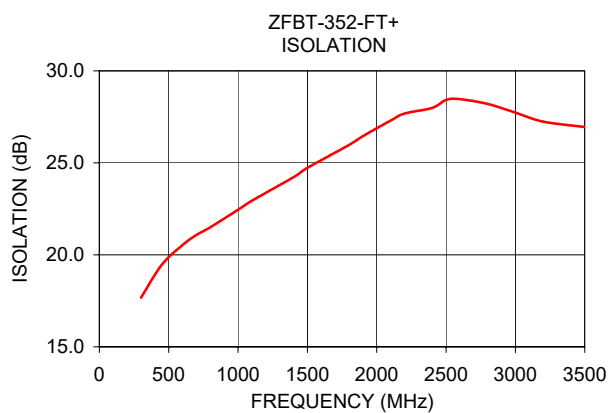
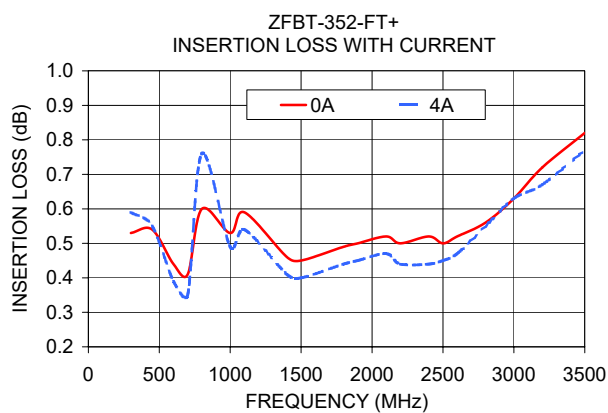
CASE STYLE: Y460

Connectors Model

SMA ZFBT-352-FT+
BRACKET (OPTION "B")

+RoHS Compliant

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



Notes

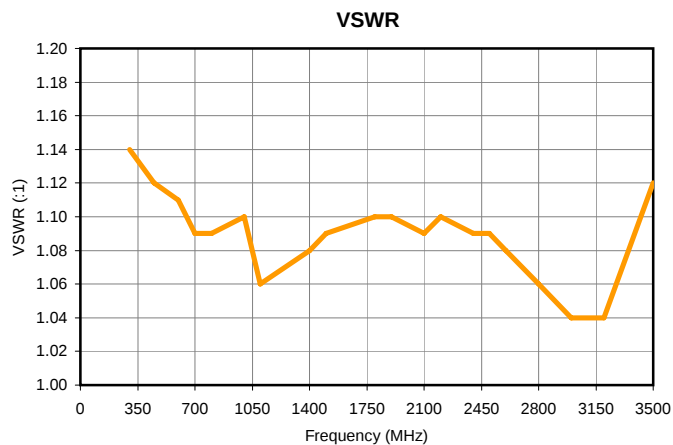
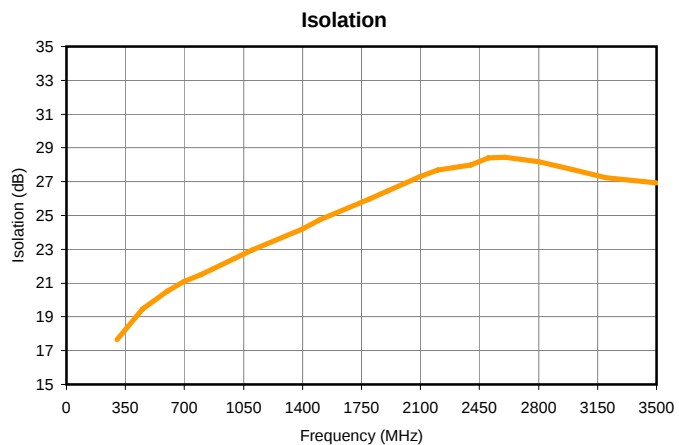
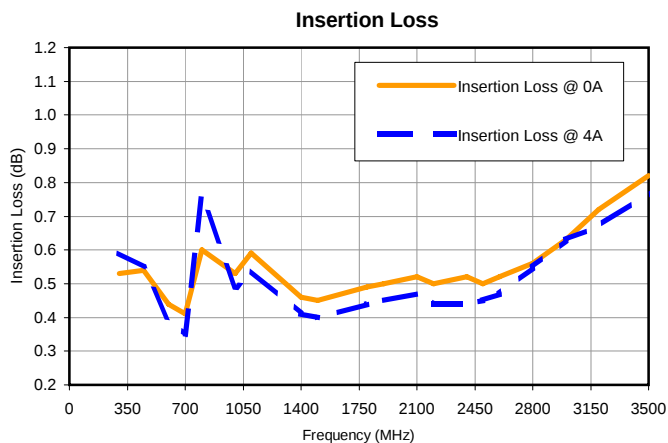
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Typical Performance Data

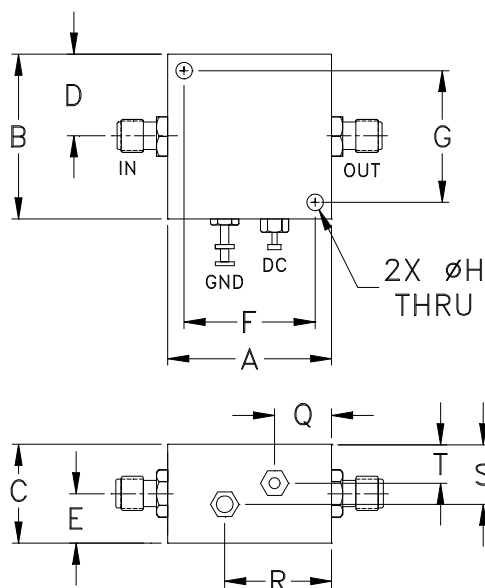
FREQ. (MHz)	PIN (dBm)	INSERTION LOSS with Current (RF port to RF&DC port) (dB)		ISOLATION (RF port to DC port) (RF&DC port to DC port) (dB)	VSWR (:1)
		0A	4A		
300.0	-8.74	0.53	0.59	17.67	1.14
450.0	-8.90	0.54	0.55	19.46	1.12
600.0	-8.81	0.44	0.39	20.53	1.11
700.0	-8.72	0.41	0.35	21.08	1.09
800.0	-8.86	0.60	0.76	21.50	1.09
1000.0	-8.89	0.53	0.49	22.45	1.10
1100.0	-8.97	0.59	0.54	22.94	1.06
1400.0	-9.15	0.46	0.41	24.22	1.08
1500.0	-9.14	0.45	0.40	24.73	1.09
1800.0	-8.85	0.49	0.44	25.97	1.10
1900.0	-8.90	0.50	0.45	26.45	1.10
2100.0	-9.02	0.52	0.47	27.30	1.09
2200.0	-9.11	0.50	0.44	27.68	1.10
2400.0	-9.19	0.52	0.44	27.99	1.09
2500.0	-9.20	0.50	0.45	28.42	1.09
2600.0	-9.27	0.52	0.47	28.46	1.08
2800.0	-9.40	0.56	0.55	28.20	1.06
3000.0	-9.48	0.63	0.63	27.73	1.04
3200.0	-9.50	0.72	0.67	27.24	1.04
3500.0	-9.58	0.82	0.77	26.95	1.12

Typical Performance Curves

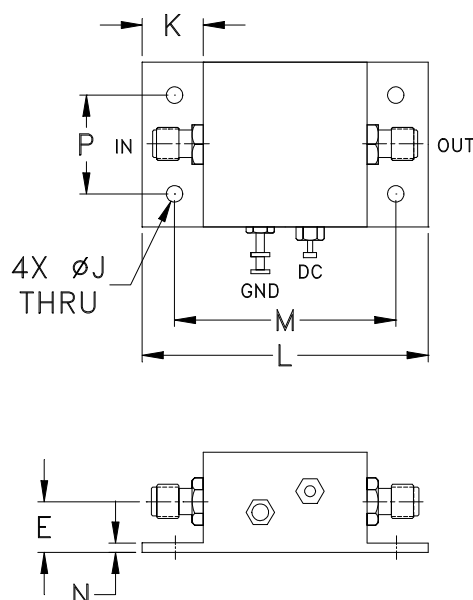


Outline Dimensions

STANDARD



OPTION "B"



CASE#	A	B	C	D	E	F	G	H	J	K	L	M	N
Y460	1.25 (31.75)	1.25 (31.75)	.75 (19.05)	.63 (16.0)	.36 (9.15)	1.000 (25.4)	1.000 (25.4)	.125 (3.2)	.125 (3.2)	.46 (11.7)	2.18 (55.4)	1.688 (42.9)	.06 (1.5)

CASE#	P	Q	R	S	T	WT. GRAMS
Y460	.750 (19.0)	.50 (12.7)	.80 (20.3)	.45 (11.4)	.29 (7.4)	38

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 on request. Add suffix B to part number



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P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

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Mini-Circuits ISO 9001 & ISO 14001 Certified



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