

DC Pass

Power Splitter/Combiner

ZN3PD-622W-S+

3 Way-0° 50Ω 1800 to 6200 MHz

Maximum Ratings

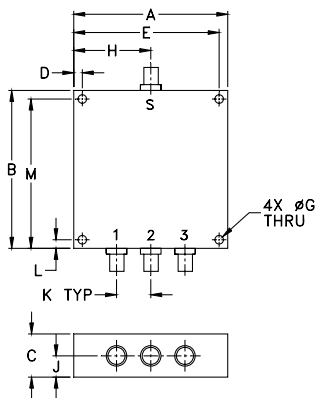
Operating Temperature	-55 °C to +100 °C
Storage Temperature	-55 °C to +100 °C
Power Input (as a splitter)	10 W max.
Internal Dissipation	0.6 W max.
DC Current	750 mA (250 mA for each port)

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

Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	3

Outline Drawing

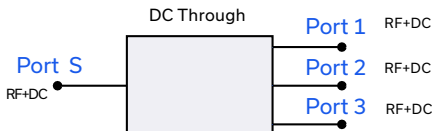


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
2.25	2.30	.63	.125	2.125	—	.125
57.15	58.42	16.00	3.18	53.98	—	3.18

H	J	K	L	M	wt
1.13	.31	.500	.125	2.175	grams
28.70	7.87	12.70	3.18	55.25	94

Electrical Schematic



Features

- wideband, 1800 to 6200 MHz
- low insertion loss, 0.9 dB typ.
- low phase unbalance, 3.0 deg. typ.
- good isolation, 22 dB typ.
- DC Pass from sum port to all output ports

Applications

- PCS/UMTS
- LTE
- WIMAX
- WiFi
- bluetooth



CASE STYLE: UU181

Connectors Model

SMA ZN3PD-622W-S+

+RoHS Compliant

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

Electrical Specifications at +25 °C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		1800		6200	MHz
Insertion Loss Above 4.8 dB	1800-6200	—	1.0	1.5	
	2300-6000	—	0.8	1.2	dB
Isolation	1800-6200	15	20	—	
	2300-6000	16	22	—	dB
Phase Unbalance	1800-6000	—	3	7	Degree
Amplitude Unbalance	1800-6200	—	0.6	0.9	dB
VSWR (Port S)	1800-6200	—	1.4	—	:1
VSWR (Port 1-3)	1800-6200	—	1.3	—	:1

Notes

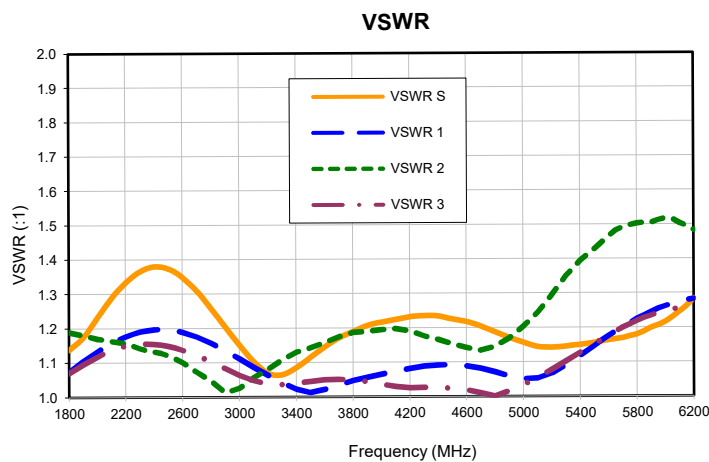
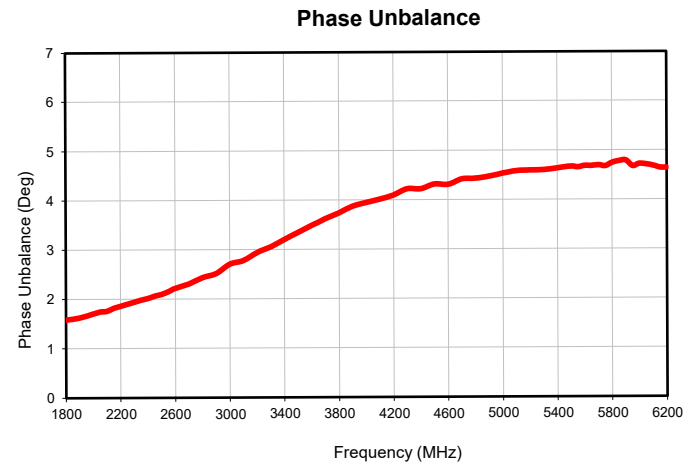
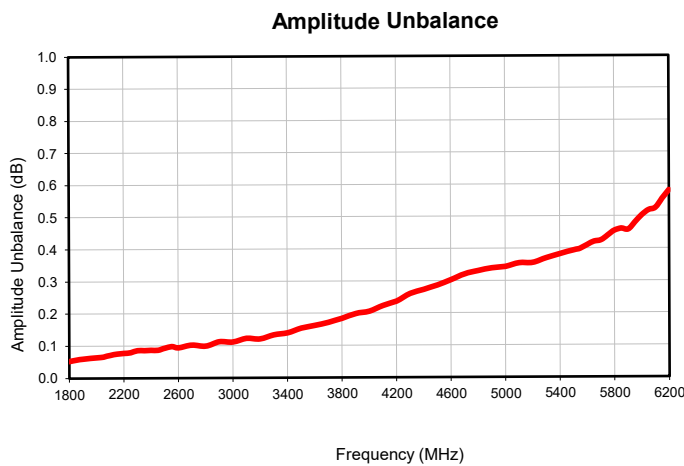
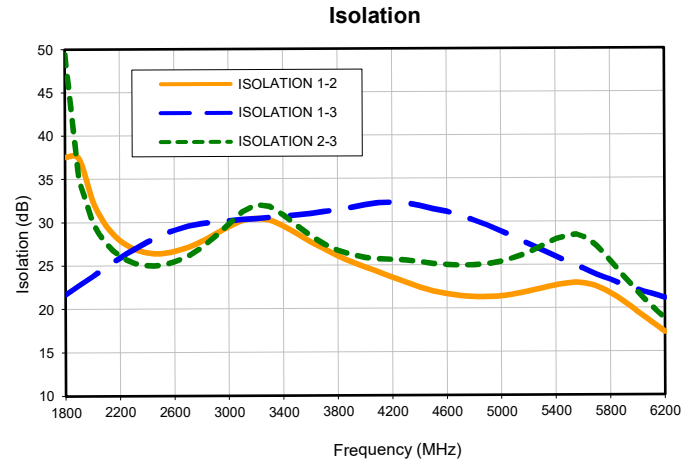
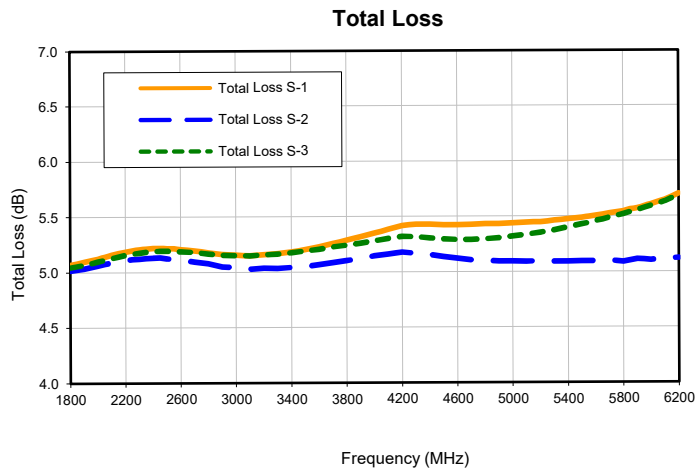
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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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 ED-14660/1
 ZN3PD-622W-S+
 MCL NY
 260902

ZN3PD-622W-S+

Typical Performance Graphs



Notes

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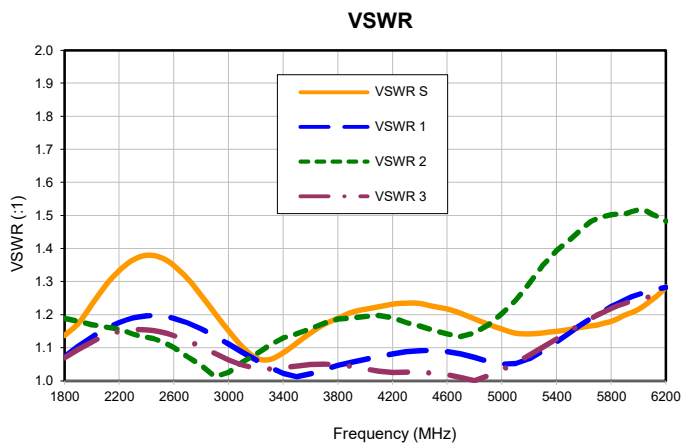
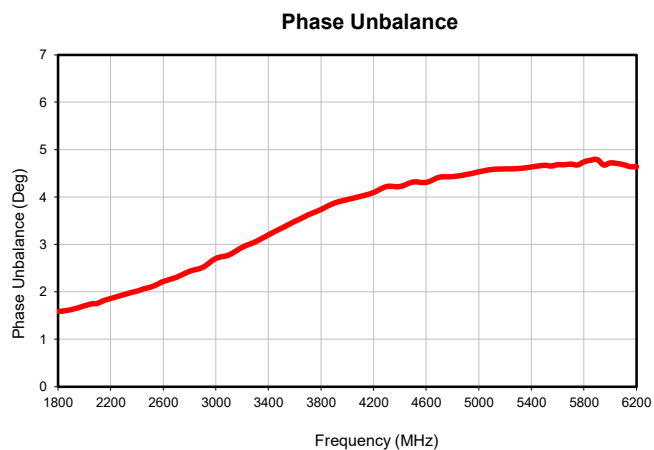
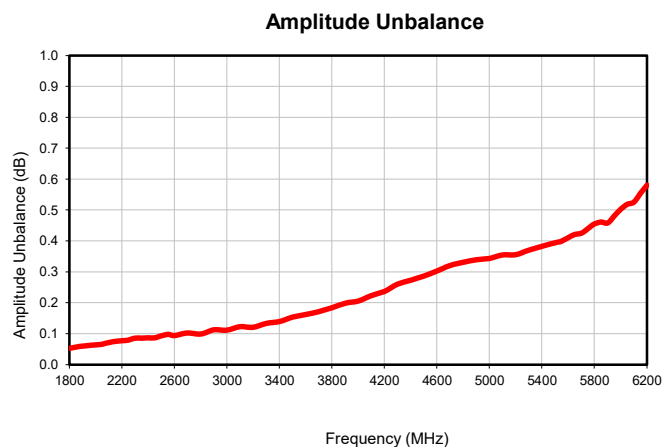
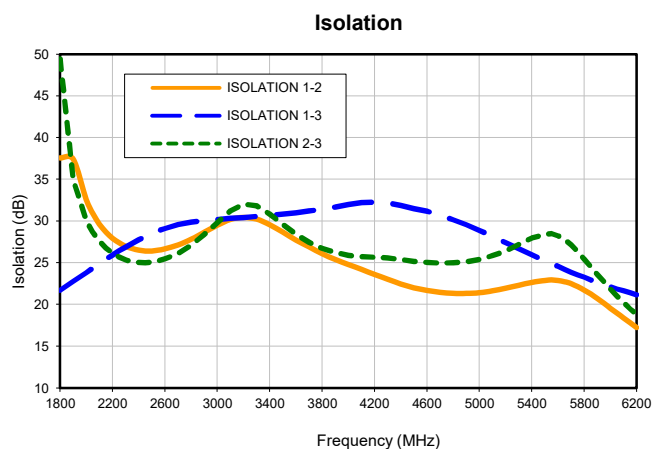
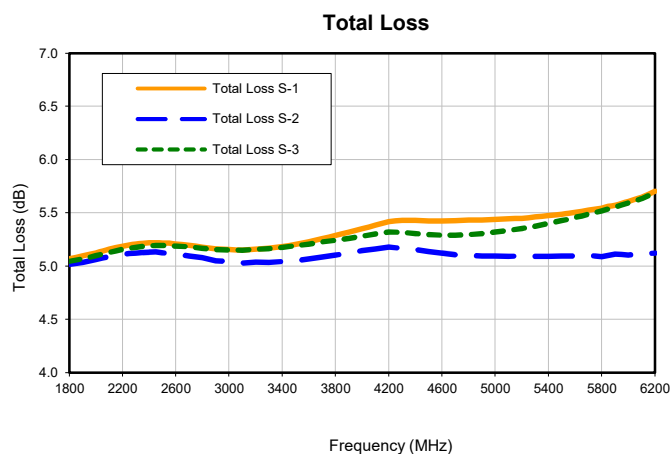
Typical Performance Data

FREQ. (MHz)	TOTAL LOSS ¹			AMP UNBAL. (dB)	ISOLATION			PHASE UNBAL. (Deg)	FREQ. (MHz)	VSWR			
	S1	S2	S3		1-2	1-3	2-3			S	1	2	3
1800	5.07	5.02	5.04	0.05	37.56	21.71	49.44	1.58	1800	1.14	1.07	1.19	1.07
1900	5.10	5.03	5.07	0.06	37.43	22.77	34.96	1.63	1900	1.17	1.10	1.18	1.09
2000	5.12	5.06	5.10	0.06	32.57	23.83	30.07	1.71	2000	1.23	1.13	1.17	1.12
2050	5.14	5.08	5.11	0.07	30.90	24.36	28.65	1.74	2050	1.26	1.15	1.17	1.13
2100	5.16	5.09	5.13	0.07	29.64	24.88	27.59	1.76	2100	1.29	1.16	1.16	1.14
2150	5.17	5.10	5.14	0.08	28.68	25.43	26.77	1.82	2150	1.31	1.17	1.16	1.14
2200	5.19	5.11	5.16	0.08	27.94	25.93	26.14	1.86	2200	1.33	1.18	1.16	1.15
2250	5.20	5.12	5.17	0.08	27.40	26.43	25.69	1.90	2250	1.35	1.18	1.15	1.15
2300	5.21	5.12	5.18	0.09	26.98	26.90	25.35	1.94	2300	1.37	1.19	1.14	1.15
2350	5.21	5.13	5.19	0.09	26.70	27.32	25.14	1.98	2350	1.38	1.19	1.14	1.15
2400	5.22	5.13	5.19	0.09	26.53	27.76	25.03	2.02	2400	1.38	1.20	1.13	1.15
2450	5.22	5.13	5.19	0.09	26.42	28.16	25.01	2.06	2450	1.38	1.20	1.13	1.15
2500	5.22	5.12	5.19	0.09	26.42	28.52	25.08	2.10	2500	1.37	1.20	1.12	1.15
2550	5.22	5.12	5.19	0.10	26.51	28.85	25.24	2.15	2550	1.36	1.19	1.11	1.14
2600	5.21	5.11	5.19	0.09	26.67	29.12	25.45	2.22	2600	1.35	1.19	1.10	1.14
2700	5.20	5.09	5.18	0.10	27.12	29.56	26.13	2.31	2700	1.31	1.18	1.07	1.12
2800	5.18	5.08	5.17	0.10	27.82	29.87	27.12	2.44	2800	1.26	1.16	1.05	1.10
2900	5.16	5.05	5.15	0.11	28.65	30.08	28.37	2.52	2900	1.20	1.13	1.01	1.08
3000	5.16	5.05	5.15	0.11	29.50	30.20	29.82	2.71	3000	1.15	1.11	1.03	1.06
3100	5.15	5.03	5.15	0.12	30.19	30.36	31.21	2.78	3100	1.10	1.09	1.06	1.05
3200	5.16	5.04	5.16	0.12	30.43	30.41	32.04	2.94	3200	1.07	1.06	1.08	1.04
3300	5.17	5.04	5.17	0.13	30.23	30.56	31.82	3.06	3300	1.06	1.04	1.11	1.04
3400	5.18	5.04	5.17	0.14	29.56	30.68	30.85	3.20	3400	1.09	1.02	1.13	1.04
3500	5.20	5.05	5.19	0.15	28.67	30.83	29.60	3.35	3500	1.11	1.01	1.14	1.05
3600	5.23	5.07	5.21	0.16	27.72	30.98	28.41	3.49	3600	1.15	1.02	1.16	1.05
3700	5.26	5.09	5.23	0.17	26.91	31.23	27.45	3.62	3700	1.17	1.03	1.17	1.05
3800	5.29	5.10	5.24	0.18	26.09	31.43	26.75	3.74	3800	1.19	1.05	1.19	1.05
3900	5.32	5.12	5.26	0.20	25.40	31.69	26.22	3.87	3900	1.21	1.06	1.19	1.04
4000	5.35	5.14	5.28	0.21	24.80	31.99	25.89	3.95	4000	1.22	1.07	1.19	1.04
4100	5.38	5.16	5.30	0.22	24.20	32.21	25.72	4.01	4100	1.22	1.07	1.20	1.03
4200	5.42	5.18	5.32	0.24	23.60	32.27	25.67	4.10	4200	1.23	1.08	1.19	1.03
4300	5.43	5.17	5.32	0.26	23.01	32.16	25.56	4.22	4300	1.24	1.09	1.18	1.03
4400	5.43	5.16	5.31	0.27	22.47	31.89	25.39	4.22	4400	1.23	1.09	1.17	1.03
4500	5.42	5.14	5.30	0.29	22.01	31.47	25.16	4.32	4500	1.22	1.09	1.15	1.02
4600	5.42	5.12	5.29	0.30	21.69	31.18	25.06	4.31	4600	1.22	1.09	1.14	1.02
4700	5.43	5.11	5.29	0.32	21.46	30.68	24.95	4.42	4700	1.20	1.08	1.13	1.01
4800	5.43	5.10	5.30	0.33	21.33	30.16	25.00	4.43	4800	1.19	1.07	1.15	1.00
4900	5.43	5.09	5.31	0.34	21.33	29.55	25.14	4.47	4900	1.17	1.06	1.17	1.02
5000	5.44	5.09	5.32	0.34	21.41	28.89	25.37	4.53	5000	1.16	1.05	1.20	1.03
5100	5.45	5.09	5.33	0.36	21.64	28.18	25.85	4.58	5100	1.14	1.05	1.24	1.05
5200	5.45	5.09	5.35	0.36	21.94	27.44	26.43	4.59	5200	1.14	1.07	1.30	1.08
5300	5.46	5.09	5.38	0.37	22.30	26.69	27.18	4.60	5300	1.15	1.09	1.35	1.10
5400	5.47	5.09	5.40	0.38	22.66	25.96	27.96	4.64	5400	1.15	1.12	1.39	1.13
5500	5.49	5.09	5.43	0.39	22.89	25.26	28.43	4.67	5500	1.16	1.15	1.43	1.15
5550	5.50	5.10	5.44	0.40	22.93	24.89	28.48	4.65	5550	1.16	1.16	1.45	1.16
5600	5.50	5.09	5.46	0.41	22.88	24.57	28.22	4.69	5600	1.16	1.18	1.47	1.18
5650	5.51	5.09	5.47	0.42	22.74	24.22	27.79	4.68	5650	1.17	1.19	1.48	1.19
5700	5.53	5.10	5.49	0.43	22.49	23.87	27.16	4.70	5700	1.17	1.20	1.49	1.20
5750	5.53	5.09	5.50	0.44	22.14	23.55	26.32	4.68	5750	1.17	1.21	1.50	1.21
5800	5.55	5.09	5.52	0.46	21.72	23.27	25.43	4.75	5800	1.18	1.22	1.50	1.22
5850	5.56	5.10	5.54	0.46	21.25	22.94	24.52	4.78	5850	1.19	1.23	1.50	1.23
5900	5.57	5.11	5.55	0.46	20.71	22.65	23.60	4.79	5900	1.20	1.25	1.50	1.23
5950	5.59	5.11	5.57	0.48	20.15	22.39	22.72	4.67	5950	1.21	1.25	1.51	1.24
6000	5.61	5.10	5.59	0.50	19.55	22.12	21.83	4.72	6000	1.22	1.26	1.52	1.25
6050	5.63	5.11	5.62	0.52	18.96	21.86	21.00	4.71	6050	1.23	1.27	1.51	1.25
6100	5.65	5.12	5.63	0.53	18.39	21.63	20.24	4.68	6100	1.25	1.27	1.50	1.26
6150	5.67	5.12	5.66	0.55	17.82	21.40	19.50	4.64	6150	1.26	1.28	1.49	1.26
6200	5.70	5.12	5.69	0.58	17.25	21.16	18.79	4.64	6200	1.28	1.28	1.48	1.26

3 Way-0° Power Splitter/Combiner

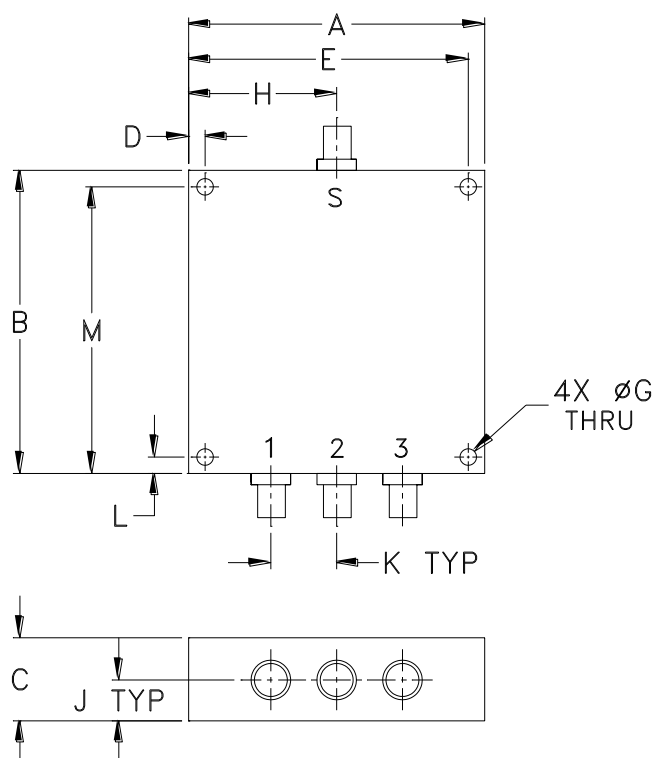
ZN3PD-622W-S+

Typical Performance Curves



Outline Dimensions

UU181



CASE#	A	B	C	D	E	F	G	H	J	K	L	M	WT. GRAMS
UU181	2.25 (57.15)	2.30 (58.42)	.63 (16.00)	.125 (3.18)	2.125 (53.98)	-- --	.125 (3.18)	1.13 (28.70)	.31 (7.87)	.500 (12.70)	.125 (3.18)	2.175 (55.24)	94

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

Notes:

1. Case material: Aluminum alloy.
2. Case finish:
For RoHS Case Styles: Clear chemical conversion coating, non-chrome or trivalent chrome based.
3. Refer to the individual model data sheet for the type of connectors available.



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



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RF/IF MICROWAVE COMPONENTS



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