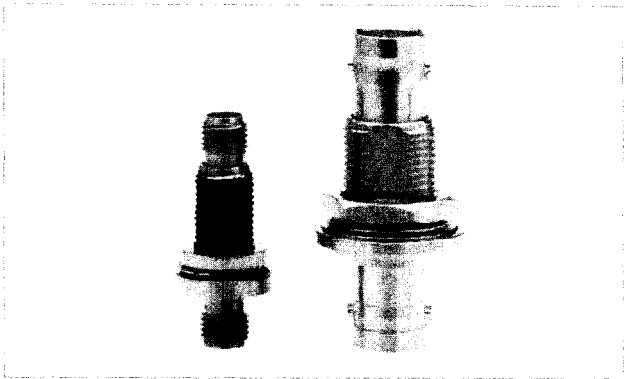


SERIES 3404

SMALL SIZE PROTECTOR

Features

- miniature style
- suitable as chassis feedthrough for equipment
- broadband, DC to 2 GHz
- fast reaction



Description

Series 3404 small size protectors serve the purpose of protecting sensitive equipment from NEMP threat or static overvoltage. A permanently installed fast coaxial surge arrester capsule gives this component its excellent dynamic characteristics. The mechanical dimensions equal those of standard bulkhead adaptors which allows an easy replacement

of such connectors in order to NEMP harden a specific system. Due to its miniature construction the current handling capability of these NEMP protectors is limited to 1 kA. **All bold printed types within the following table are normally available from stock.**

Technical data

Diversion behaviour:

Static sparkover voltage:	U_{Zstat} :	$\Delta U/\Delta t \leq 100$ V/ms:	150 – 250 V
Dynamic sparkover voltage:	U_{Zdyn1} :	$\Delta U/\Delta t = 1$ kV/ μ s:	400 V (typ.)
	U_{Zdyn2} :	$\Delta U/\Delta t = 1$ kV/ns:	1200 V (typ.)
Current handling capability:	I_S :	Impuls 8/20 μ s:	1 kA
Max. input power (linearly decreasing):	P_{IN} :	50W @ DC	
		25W @ 1 GHz	
		12W @ 2 GHz	

NEMP Residual Pulse Energy (5/200 ns; 5kV; 50mJ input-pulse) = 0.04 mJ

Standard:

Connector mating faces: IEC 169, MIL-C-39012

Materials:

Part of protector	Material	Standard	Surface treatment
Body	Brass, annealed CuBe	ISO CuZn 38 Pb2, MIL-H-7199	Sucoplate [®] or gold
Washer	Soft copper	SUHNER specification	Nickel
Insulators	PTFE	L-P-403, BS 4271, Grade B	
Contact pins and sockets	Beryllium-copper, hardened, HV 350	QQ-C-530, MIL-H-7199, CuBe2	2.5 μ , gold plated, MIL-G-45204, Type II, Class 2

SERIES 3404

SMALL SIZE PROTECTOR

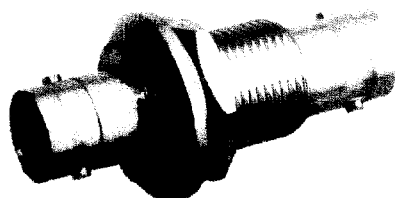
Environmental conditions:

Operating temperature range: $-40 \dots +100^{\circ}\text{C}$

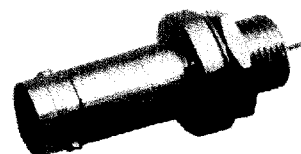
Tests: Temperature shock: MIL-STD-202, Method 107 F, Condition B, $-65^{\circ}\text{C}/+85^{\circ}\text{C}$
 Moisture resistance: MIL-STD-202, Method 106 D, 10 cycles
 Vibration: MIL-STD-202, Method 204, Condition D, 20 g, 10 – 2000 Hz
 Low pressure: SUHNER, 66.6 Pa (0.66 mbar)

Connectors:

BNC



3404.01.A



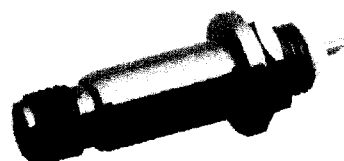
3404.01.D

SUHNER TYPE	Connectors	Imp. (Ω)	Frequency (MHz)	VSWR	Ins. Loss (dB)/typ.	Weight (g)	Panel thickness (mm)	MH	V-groove	Fig.
3404.01.A	BNC neg.–neg.	50	DC–1000 1000–2000	≤ 1.15 ≤ 1.35	≤ 0.3 ≤ 0.6	30	8.0	4	–214	39
3404.01.D	BNC neg.–solder tag	50	DC–1000 1000–2000	$\leq 1.15^*$ $\leq 1.35^*$	≤ 0.3 ≤ 0.6	22	5.0	2	–215	40

SMA



3404.19.A



3404.19.D

SUHNER TYPE	Connectors	Imp. (Ω)	Frequency (MHz)	VSWR	Ins. Loss (dB)/typ.	Weight (g)	Panel thickness (mm)	MH	V-groove	Fig.
3404.19.A	SMA neg.–neg.	50	DC–1000 1000–2000	≤ 1.15 ≤ 1.35	≤ 0.3 ≤ 0.6	10	8.0	38	–216	41
3404.19.D	SMA neg.–solder tag	50	DC–1000 1000–2000	$\leq 1.15^*$ $\leq 1.35^*$	≤ 0.3 ≤ 0.6	7	2.5	20	–218	42

* with optimal assembling technique

Drawings corresponding with "Fig." and "MH" see pages 37 – 40.

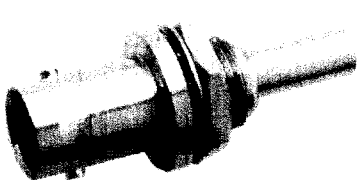
SERIES 3404

SMALL SIZE PROTECTOR

NEMP adaptors "between series"

Connectors:

MCX-BNC



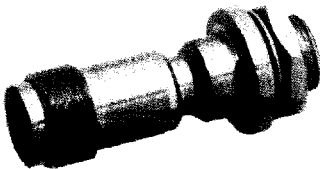
3404.00.G



3404.00.E

SUHNER TYPE	Connectors	Imp. (Ω)	Frequency (MHz)	VSWR	Ins. Loss (dB)/typ.	Weight (g)	Panel thickness (mm)	MH	V-groove	Fig.
3404.00.G	MCX-BNC neg.-neg.	50	DC-1000 1000-2000	≤ 1.15 ≤ 1.35	≤ 0.3 ≤ 0.6	12	3.5	2	—	43
3404.00.E	MCX-BNC neg.-neg.	50	DC-1000 1000-2000	≤ 1.15 ≤ 1.35	≤ 0.3 ≤ 0.6	18	3.0	2	-217	44

MCX-TNC



3404.00.F

SUHNER TYPE	Connectors	Imp. (Ω)	Frequency (MHz)	VSWR	Ins. Loss (dB)/typ.	Weight (g)	Panel thickness (mm)	MH	V-groove	Fig.
3404.00.F	MCX-TNC neg.-neg.	50	DC-1000 1000-2000	≤ 1.15 ≤ 1.35	≤ 0.3 ≤ 0.6	20	3.0	2	-217	45

Drawings corresponding with "Fig." and "MH" see pages 37 – 40.