

**CARBON TRANSMITTER**  
**BT-T2**

SPEC.NO MHS-C-134B

1 SCOPE

This specification covers a carbon type transmitter for payphone handsets.

2 DESIGN AND CONSTRUCTION

The transmitter shall be of the design, construction and physical dimensions as shown in Fig.1

3 ELECTRICAL AND ACOUSTICAL CHARACTERISTICS

NO.	TEST	REQUIREMENTS	TEST CONDITIONS
3.1	Transmit Objective Loudness Rating	RS-470-1981 0K ft : -50 +/- 5 dB 9K ft : -44.5 +/- 5 dB 15K ft: -40.5 +/-8.5 dB	1) RS-470-1981 2) Telephone Network: Type 2500 3) Handset : 500 Type 4) Cable : #26AWG
3.2	Frequency Responses	RS-470 (Fig. 2)	
3.3	Resistance (1KHz, 50mV D.C)	35 - 95 ohms	
3.4	Self-Generated Noise	Less than 15dBmC	1) RS-470-1981 2) IEEE-269-1971: 3) Telephone Network:Type 2500 * Over a 5 Second Period * Loop Current : 90,60,30mA DC * Transmitter Diaphragm Position : Vertical Plane 45 Degree to The Vertical Plane

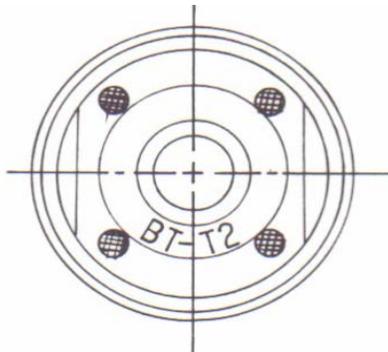
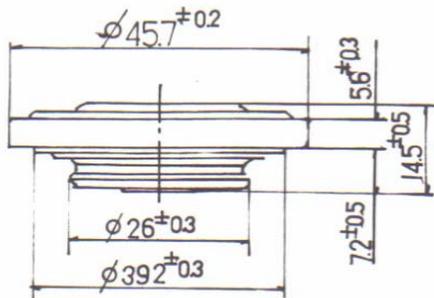
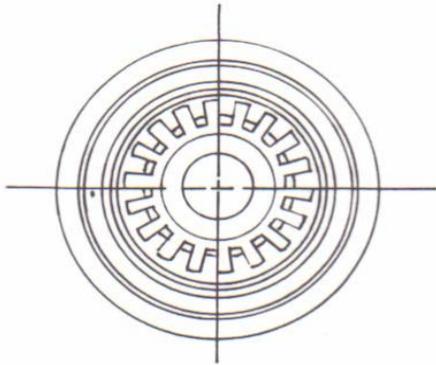
4 ENVIRONMENTAL TEST

4.1 GENERAL

After any following test, the response at 1KHz shall not vary more than 4dB from the initial value.

4.2 TEST

NO.	TEST	TEST CONDITIONS
4.2.1	Humidity	1) Temperature : 40 +/- 3 C 2) Relative Humidity : 90 - 95% RH 3) Duration of Exposure : 72 Hours 4) Duration of Recovery : 6 Hours
4.2.2	Low Temperature	1) Temperature : -20 +/- 3 C 2) Duration of Exposure : 72 Hours 3) Duration of Recovery : 6 Hours
4.2.3	High Temperature	1) Temperature : 60 +/-3 C 2) Duration of Exposure : 72 Hours 3) Duration of Recovery : 6 Hours
4.2.4	Shock Drop	1) Mounting : # 500 Type Handset 2) Direction : Random Drop 3) Height : 1 Meter 4) Floor : Concrete floor faced with 5 mm thick hard wood board 5) Number of Drop : 10 times
4.2.5	Vibration	1) Mounting : Rigidly Mounted on the Table 2) Direction : 3 Mutually Perpendicular Directions 3) Frequency : Varied logarithmically from 10 to 50 Hz and back to 10 Hz every one min. 4) Amplitude : 1.5 mp-p 5) Duration : 6 Hours (2 Hours in each of 3 direction)
5	SPECIAL MEASUREMENTS FOR MOISTURE-PROOF  5.1 Silk Washer : Coated Silk Washer 5.2 Moisture-Proof Membrane : Vinyle ( 0.08*) 5.3 Subsidiary Moisture-Proof Membrane : Constricted Vinyle Tuble ( 0.1*) to Seal The Diaphragm Assembly and The Frame Protective Plate 5.4 Moveable Electrode and Fixed Electroode : Gold Plated	



14	Cap	Brass	NI plating
13	Carbon Granules	Carbon	
12	Terminal Ring	Brass	NI plating
11	Insulation Washer	Bake-Lite	
10	Contacted Electrode	Copper	AU plating
9	Carbon Chamber	Resin	
8	Insulator		
8	Damping Cloth	Silk	
7	Frame	Al-alloy Diecasting	
6	Movable Electrode	Copper	AU plating
5	Diaphragm	Aluminium	
4	Silk Washer	Silk	
3	Moisture-Proof Membrane	P.E	
2	Protective Plate	Aluminium	
1	Ferrule	Iron	ZN plating
No.	Description	Material	Remarks

UNIT	SCALE	TOLERANCES			DESCRIPTION	DRAWING NO.
		LENGTHS	ANGLES	WEIGHTS		
mm					CARBON TRANSMITTER BT-T2	MHS-C-138B

Fig 2 FREQUENCY RESPONSE LIMIT CURVES (RELATIVE TO 1 KHz RESPONSES) (dB)

