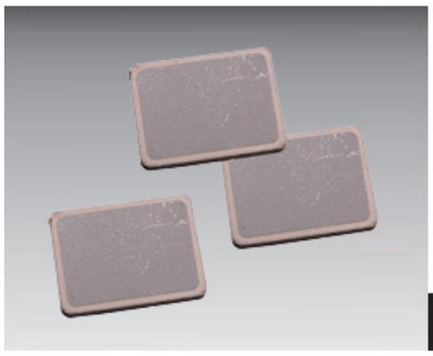


Features

- Self-regulating heating
- Constant temperature control
- Simple circuit design
- Suitable for clamp-contacting
- Stable over long life
- Silver or aluminum metallization

Applications

Transportation:

- Cabin air heating
- Fuel heating
- Battery temperature control
- Camera lens de-icing

Appliances:

- HVAC systems
- Portable space heaters

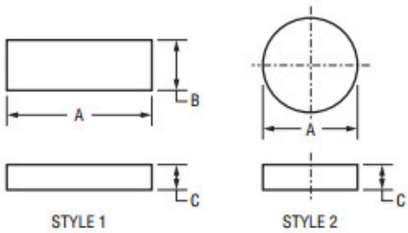
HT -Series – Ceramic PTC Thermistor Heaters

Product Characteristics

Part Number	Electrical Characteristics				
	Curie Temperature T_C	Surface Temperature T_{surf}	Rated Resistance R_N @ 25 °C	Maximum Voltage V_{max}	Rated Voltage V_N
	(°C)	(°C)	(Ω)	(V)	(V)
HTD08102□P3BB	30	50	1000	270 AC	240 AC
HTD13102□PFBB	55	75	1000	270 AC	240 AC
HTD13150□PG60	65	75	15	60	42
HTRA1181□P7AA	70	90	180	140 AC	110/120 AC
HTRA1301 □P7AA	70	85	300	140 AC	110/120 AC
HTRA1701□ P8BB	80	100	700	270 AC	220/240 AC
HTRA2501□P9BB	90	110	500	270 AC	220/240 AC
HTD08100□X030	100	110	10	30	24
HTD10180□X060	100	110	18	30	24
HTD08180□X030	100	110	18	60	42
HTD08102□X1BB	110	130	1000	270 AC	240 AC
HTD20102□X1BB	110	130	1000	270 AC	240 AC
HTD10501□X3BB	130	150	500	270 AC	240 AC
HTD10102□XDBB	135	155	1000	270 AC	240 AC
HTD10501□XDBB	135	155	500	270 AC	240 AC
HTD13360□X430	140	150	36	30	24
HTD13680□XE60	145	155	68	60	42
HTD10201□X5BB	150	170	200	270 AC	220/240 AC
HTD17150□X560	150	160	15	60	42
HTD10301□X6AA	160	175	300	140 AC	110 AC
HTD10102□XGBB	165	180	1000	270 AC	240 AC
HTD10501□X7BB	170	185	500	270 AC	240 AC
HTD203R6□XY60	170	180	3.6	60	42
HTD14501□XHBB	175	190	500	270 AC	220/240 AC
HTDRA3801□Y1BB	210	230	800	270 AC	220/240 AC
HTD13152□YBBB	215	230	1500	270 AC	240 AC
HTDA2301□Y3AA	230	250	300	140 AC	100/120 AC
HTD13152□ YBBB	235	250	1500	270 AC	240 AC
HTD20362□ YDBB	235	250	3600	270 AC	240 AC
HTRA2701□Y4BB	240	255	700	270 AC	220/240 AC
HTRA4501□Y4BB	240	255	500	270 AC	220/240 AC
HTRA5102□Y6BB	260	275	1000	270 AC	220/240 AC
HTRA6152□YF0	210	220	1500	500 DC	400 DC
HTRA7802□YAI0	205	225	8000	855 DC	800 DC

HT -Series – Ceramic PTC Thermistor Heaters

Product Dimensions



DIMENSIONS: MM / (INCHES)

Part Number	Style	Dimensions		
		Dim. A	Dim. B	Dim. C
		± 0.1 (± .004)	± 0.1 (± .004)	± 0.2 (± .008)
HTD08102□P3BB	2	8 (.315)	—	3 (.118)
HTD13102□PFBB	2	13 (.512)	—	2.3 (.091)
HTD13150□PG60	2	13 (.512)	—	1.5 (.059)
HTRA1181□P7AA	1	16 (.630)	11 (.433)	2.5 (.098)
HTRA1301 □P7AA	1	16 (.630)	11 (.433)	2.5 (.098)
HTRA1701□ P8BB	1	16 (.630)	11 (.433)	2.5 (.098)
HTRA2501□P9BB	1	23.5 (.925)	10 (.394)	2.2 (.087)
HTD08100□X030	2	8 (.315)	—	1.5 (.059)
HTD10180□X060	2	8 (.315)	—	1.5 (.059)
HTD08180□X030	2	10 (.394)	—	2.5 (.098)
HTD08102□X1BB	2	8 (.315)	—	2.3 (.091)
HTD20102□X1BB	2	20 (.787)	—	2.3 (.091)
HTD10501□X3BB	2	10 (.394)	—	2.3 (.091)
HTD10102□XDBB	2	10 (.394)	—	2.3 (.091)
HTD10501□XDBB	2	10 (.394)	—	2.3 (.091)
HTD13360□X430	2	10 (.394)	—	2.3 (.091)
HTD13680□XE60	2	13 (.512)	—	1.3 (.051)
HTD10201□X5BB	2	13 (.512)	—	1.3 (.051)
HTD17150□X560	1	10 (.394)	10 (.394)	2.3 (.091)

Part Number	Style	Dimensions		
		Dim. A	Dim. B	Dim. C
		± 0.1 (± .004)	± 0.1 (± .004)	± 0.2 (± .008)
HTD10301□X6AA	2	17 (.669)	—	1.4 (.056)
HTD10102□XGBB	2	10 (.394)	—	2.3 (.091)
HTD10501□X7BB	2	10 (.394)	—	2.3 (.091)
HTD203R6□XY60	2	10 (.394)	—	2.3 (.091)
HTD14501□XHBB	2	20 (.787)	—	1.4 (.056)
HTDRA3801□Y1BB	2	14 (.551)	—	2.3 (.091)
HTD13152□YBBB	1	19 (.748)	12 (.472)	2.2 (.087)
HTDA2301□Y3AA	2	13 (.512)	—	2.5 (.098)
HTD13152□ YBBB	1	23.5 (.925)	10 (.394)	2.2 (.087)
HTD20362□ YDBB	2	13 (.512)	—	2.5 (.098)
HTRA2701□Y4BB	2	20 (.787)	—	2.5 (.098)
HTRA4501□Y4BB	1	23.5 (.925)	10 (.394)	2.2 (.087)
HTRA5102□Y6BB	1	36 (1.417)	6 (.236)	2.3 (.091)
HTRA6152□YF0	1	24 (.945)	15 (.591)	2.2 (.087)
HTRA7802□YAI0	1	24 (.945)	15 (.591)	2.2 (.087)

HT -Series – Ceramic PTC Thermistor Heaters

Packaging

ht-Series ceramic PTC thermistor heater products are packaged in bulk packaging boxes according to each model's specific requirements. Standard and custom packaging options are available upon request.

Environmental Characteristics

Typical Working Temperature Range	For V=0: -40 °C to +220 °C For V=V_r: -40 °C to +100 °C For V=V_r with $T_c \leq 60$ °C: -40 °C to +60 °C
Moisture Sensitivity Level (MSL)	1
ESD Classification (HBM)	Class 6

Test Procedures and Requirements

Test	Test Condition and Method	Standard	Requirement
Endurance at maximum operating temperature and maximum voltage	At 80 +2/-0 °C, V_{max} Test duration: 1000 ±2 hours Final check: Appearance and rated resistance	IEC 60738-1	No visible damage | (R2-R1) / R1 | ≤25 % R1: resistance before test R2: resistance after test
Endurance at room temperature, cycling	At 25 ±5 °C, V_{max} Power-on 60 ±5 s, Power-off 120 ±10 s, 10,000 cycles Final check: Appearance and rated resistance	IEC 60738-1	No visible damage | (R2-R1) / R1 | ≤25 % R1: resistance before test R2: resistance after test
Invariable damp heat	At temperature: 40 ±5 °C Relative humidity: 90-95 %, Voltage: 0.25 V_{max} Test duration: 1000 ±2 hours Final check: Appearance and rated resistance	IEC 60738-1	No visible damage | (R2-R1) / R1 | ≤25 % R1: resistance before test R2: resistance after test