



HI-TECH RESISTORS PVT. LTD.

BUTY COMPOUND, MOUNT ROAD EXTENSION,
NAGPUR – 440 001 (INDIA)

INTERNET : <http://www.htr-india.com>

e-mail : info@htr-india.com OR sales@htr-india.com

FAX : 91-712-2528334

91-712-2556351

TEL : 91-712-2531134

91-712-2533269

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SPECIFICATION NO.: IBS-64

DATE: 11/04/22.

REVISION NO.: -00

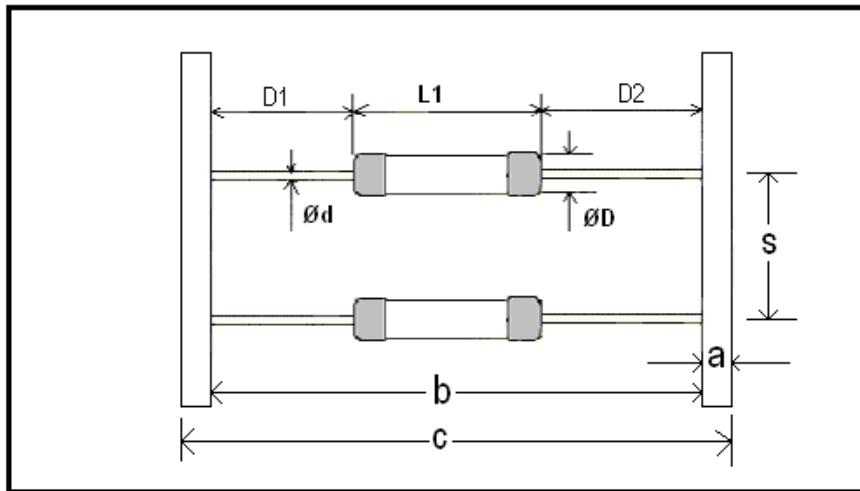
DATE: 11/04/22

NAME OF CUSTOMER: IBS ELECTRONICS



HIA H1WT* 10R F ± 1.0%

SR.NO.	SERIES	HTR PART NUMBER	POWER RATING	RESISTANCE VALUE	TOLERANCE	Typical wt. of pc
1	HIA	H1WT* 10R F	1.0W	10R	+/-1.0%	2.0



HTRPARTNO	L1 (MAX)	D Max	d (±0.08)	b (±2)	c (±2)	a (±1)	s (±0.5)
HIA H1WT* 10R F	11.50mm	4.5mm	0.8 mm	63mm	75mm	6mm	10mm

Note- The maximum difference between D1 & D2 is 1.40mm.

Drawn by : YASH SHILANKAR		SUPPLY SPECIFICATION HIA H1WT* 10R F ±1.0%
Checked by : PARVIN B KHANDEKAR		
Issued on : 11/04/22		
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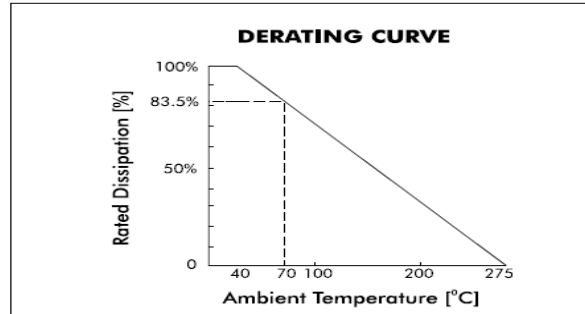
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ELECTRICAL / ENVIRONMENTAL DATA: -

PARAMETER/PERFORMANCE TEST & TEST METHOD	PERFORMANCE REQUIREMENTS
Power Rating (Rated Ambient Temperature)	Full power dissipation at upto 40°C and linearly derated down to zero dissipation at 275°C. [see Derating Curve above]
Resistance Tolerances Available (Test method no. 303 of MIL 202F)	±1%[F] :
Voltage Rating / Limiting Voltage / Max. Working Voltage	$V = \sqrt{P \times R}$
Voltage Proof / Dielectric Withstanding Voltage (based on limiting voltage x 2 or 500V whichever is applicable) (Test Method no. 301 of MIL 202F)	Max. ΔR ± (1% + R05) - No flashover, mechanical damage, arcing or insulation breakdown
Insulation Resistance (Test Method no. 302 of MIL 202F)	> 1000 M (Dry) > 100M (Wet)
Short Time Overload (Test Method - 5 secs at 5 times rated power for 3 watts and smaller; 5 secs at 10 times rated power for 4 watts and larger)	Max. ΔR ± (2% + R05)
Resistor Temperature Rise as a Function of Applied Power	As temperature rise varies between different power ratings and ratings and also between different resistance values, if this parameter is required in detail, please provide power rating (W) and resistance (R) required and factory will provide a suitable graph.

ENVIRONMENTAL SPECIFICATIONS

PARAMETER/PERFORMANCE TEST & TEST METHOD	PERFORMANCE REQUIREMENTS
Temperature Co-efficient of Resistance (Test Method 304 of MIL 202F)	± 60ppm /°C (<100R);
Temperature Cycling Test Method as per JIS-C-5202 Para 7.4 [Room Temperature ---> -55°C ---> Room Temperature ---> +155°C ---> Room Temperature for 5 cycles]	ΔR ± [2% + R05] - Typical
Damp Heat (Steady State) (Test Method No. 103B of MIL 202F and test condition 'D')	Max. Δ R ± (3% + R05) - No mechanical damage
Thermal Shock (Test Method No. 107D of MIL 202F & Test Condition 'B')	Max Δ R ±(3% + R05) - No physical Deterioration
Load Life (Test Method no. 108A of MIL 202F) (1000 hours intermittent @ 40°C)	Max. ΔR ± (3.5% + R05)

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MECHANICAL SPECIFICATIONS

PARAMETER/PERFORMANCE TEST & TEST METHOD	PERFORMANCE REQUIREMENTS
Mechanical Shock (Test Method No. 213B of MIL 202F)	Test condition & requirement to be mutually decided.
Pull Test / Robustness of Termination [Force supplied from 2 to 4.5Kgs depending on size]	No mechanical damage
Vibration (Test Method No. 201A of MIL 202F)	Max $\Delta R \pm (3\% + R05)$ - No physical damage
Solderability [Test method no.208F of MIL 202F]	$\Delta R < \pm [1\% + R05]$ - Continuous and satisfactory
Resistance to Soldering Heat (Test Method 210A of MIL 202 F & Test condition C)	Max $\Delta R \pm (2\% + R05)$
Resistance to Solvents	Marking must remain Legible.

PRINTING / MARKING: 1.HTR LOGO H1WT* 10R F DATE CODE.

REVISION HISTORY

Release	Revision	Date	Change	Change proposed by
0	00	11/04/22	INITIAL DRAFT	
1	00	11/04/22	ISSUE	

Drawn by : YASH SHILANKAR		SUPPLY SPECIFICATION HIA H1WT* 10R F $\pm 1.0\%$
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