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Product Change Notification (PCN)

Welwyn Change Management Contact
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Product Change Notification	
Date 17th November 2008	**PCN No** R005
Type of Change Notification Product Withdrawal	**Specification Ref** (Number + Version)
Key Characteristics of the Change	**Customer** (to be completed by Sales)
Description of Change (Product Characteristics affected by Change) Product Withdrawal from Production	**Reason** Rationalisation of flameproof wirewound product range
Verification N/A	
Change Active from Nov 2008	
Customer Impact of Change and Recommended Action: Qualify alternative product (see supplementary information.) Last Time Buy orders on withdrawn products will be accepted until **31st Jan 2009**	

Product Table

Product Affected / Welwyn Order Codes			
Order Codes	**Type**	**Description**	**QTY**
WA87-xxxx	Within WA80 Series	Flameproof wirewound 7W resistors	
WP7S-xxxx	Within WP-S Series		

Approved By: (Print) **Stephen Oxley** **Title:** (Print) **Snr. Applications Engineer**

Sign: _ **Date:** **17th Nov 2008**

Authorised By: (Print) **Barry Peters** **Title:** (Print) **Resistor BU Director**

Sign:_ **Date:**

Supplementary Information

Product Alternatives

WA87 and WP7S are aliases of the same product and both may be replaced by KNP7.

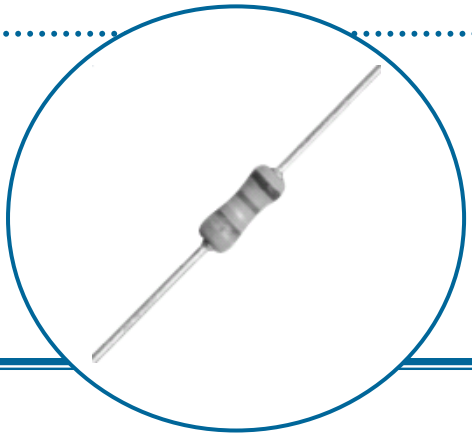
Example equivalent MPNs:

WA87-47RJI	replace by	**KNP7-47RJT07**
WP7S-47RT07	replace by	**KNP7-47RJT07**

Cement Coated Resistors
Wirewound

TT electronics
Welwyn Components

KNP Series



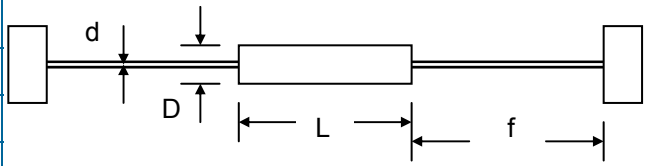
- **1 watt to 7 watts**
- **Resistance 0R1 to 1K0**
- **Flameproof coating**
- **RoHS compliant**

Electrical Data

		KNP1	KNP2	KNP3	KNP7
Power rating at 70°C	watts	1	2	3	7
Resistance range	ohms	0R1 - 30R	0R1 – 50R	0R1 – 100R	0R15 – 1K0
Limiting element voltage (LEV)	volts dc or ac rms	50	50	100	150
Thermal impedance	°C/watt	85	65	60	35
Isolation voltage	volts	300	400		700
TCR	ppm/°C	For values below 0R68 contact factory: 0R68 to 1K0 ≤ 200ppm			
Resistance Tolerance	%	5 (J)			
Standard Values		E24 preferred			
Ambient temperature range	°C	-55 to +155			

Dimensions (mm) and weight (g)

Type	L Max	F Min	D Max	d Nom ±0.05	Min bend Radius	Nom weight
KNP1	10	20	3.5	0.55	1.2	0.4
KNP2	12	24	4.7	0.75	1.6	0.8
KNP3	16.5	27	5.3	0.75	1.6	1.1
KNP7	25.0	28.3	8.8	0.75	1.2	4.4



Construction
A high purity ceramic rod, with force fit end caps, wound with a wire element; this is a then coated with a flameproof cement and marked with indelible ink

Marking
KNP resistors are colour coded with 4 bands in accordance with IEC62.

Terminations
Material: Hot tin dipped copper wire
Strength: The terminations meet the requirements of IEC 68.2.21
Solderability: The terminations meet the requirements of IEC 115-1 Clause 4.17.3.2

Solvent Resistance
The body protection and marking are resistant to all normal industrial cleaning solvents suitable for printed circuits.

Flammability
The resistor coating will not burn or emit incandescent particles under any condition of applied temperature or power overload.

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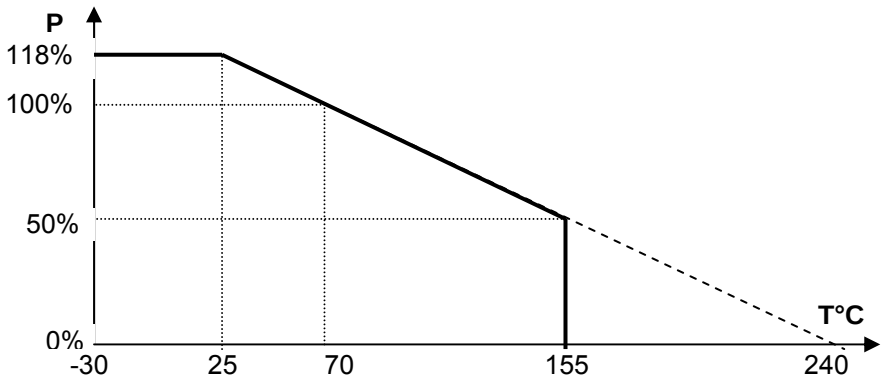
Performance Data

		Maximum
Load at rated power (1000hrs at 70°C)	ΔR%	5% + 0.05Ω
Derating from rated power at 70°C		See Graph
Short term overload *	ΔR%	2% + 0.05Ω
Damp heat steady state (56 days, 40°C, ≥ 90% RH)	ΔR%	2% + 0.05Ω
Temperature rapid change	ΔR%	2% + 0.05Ω
Resistance to solder heat	ΔR%	1% + 0.05Ω
***(The lower of; 5x rated power, or 2.5x LEV for 5secs)**		

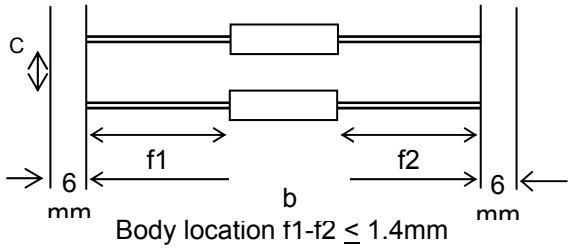
Power de-rating graph



Packaging

The preferred method of packaging is taped and ammo packed in boxes for the KNP1, 2 and 3 sizes. The KNP7 is taped and packed on reels. The critical dimensions are shown in Figure 1. The component wires will not protrude beyond the outside edge of the tapes.

Figure 1



Body location f1-f2 ≤ 1.4mm

Type	b mm	c mm
KNP1	52 ± 2	5 ± 0.5
KNP2	65 ± 2	5 ± 0.5
KNP3	73 ± 2	5 ± 0.5
KNP7	85± 2	10 ± 0.5

Ordering Procedure

Example: KNP2 at 12 ohms and 5% tolerance in ammo pack box of 1000 pieces:

KNP2 – 12RJ A1

Type

Value (use IEC62 code)

Tolerance (use IEC62 code)

J	5%

Packing

A2	Ammo Box / Taped	KNP1	2000 / box
A1		KNP2	1000 / box
A05		KNP3	500 / box
T07	Reel / Taped	KNP7	700 / reel

General Note

Welwyn Components reserves the right to make changes in product specification without notice or liability.
All information is subject to Welwyn's own test data and is considered accurate at time of print.

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