Thermally Protected Resistor

Active protection

TPR

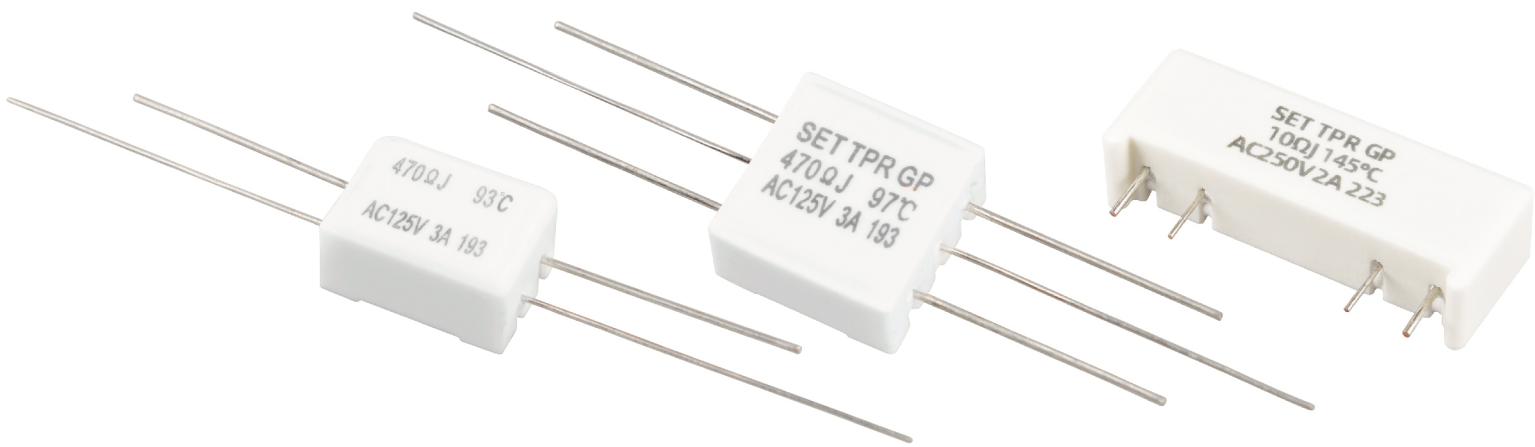
· Over Temp. Protection

· Over Current Protection

· Inrush Current Protection

· Halogen free and RoHS compliant

Please refer to the datasheet of each series.



https://setsafe.com/Products/Active-Protection/Thermally-Protected-Resistor-TPR-Active-Protection.html

2024

SET safe | SET fuse

Providing a Total Solution for High Standard Safety Circuit Protection

TPR (Active Protection)

Thermally Protected Resistor (Active Protection)

SETsafe | SETfuseThermally Protected Resistor (TPR) is an unique type of Power Resistor, with Over Temp. and Over Current Protections. Thermally Protected Resistor (TPR) is a type of power resistor, where Alloy Thermal-Link (ATCO) and Fusible Wirewound Resistor (RXF) in a ceramic case with silicone cement.

TPR is widely used in products such as LED drivers, electric blanket, industrial equipment.

SETsafe | SETfuse TPR is not only able to proceed over temp. protection by ATCO itself but also proceed over current protection by RXF transferring heat to ATCO to open the circuit. TPR (Active Protection) covers Rated Resistance from 0.27 Ω to 1,000 Ω, Rated Functioning Temp. from 93 °C to 150 °C, complies with RoHS and REACH.

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2 Glossary 2

3 Attention 3

4 Operating Principle 5

5 Product Series 6

Product Description, Features, Applications, Customization, Structure Diagrams, Dimensions, Making, Part Number System, Technical Parameter, Agency, Specifications, Fusing Time Curve, Packaging Information

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5.2 TPRC-2 Series 10

5.3 TPRD Series 14

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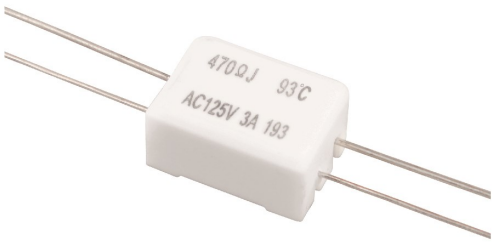
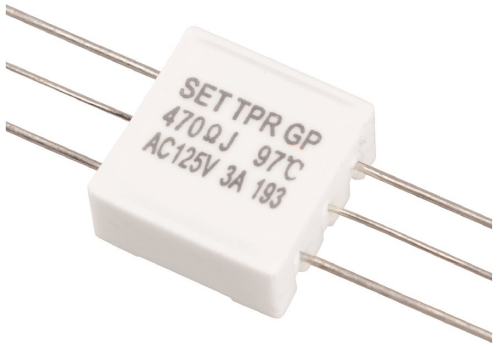
TPR (Active Protection)

Thermally Protected Resistor (Active Protection)

SETsafe | SETfuse

Thremally Protected Resistor (TPR - Active Protection) Features Overview

Page	6	10	14
Shape			
Structure	4 Pins	6 Pins	4 Pins
R Resistance Range	(0.27 ~ 1000) Ω	(0.27 ~ 1000) Ω	(0.27 ~ 1000) Ω
	According to IEC60063-2015，resistance can be customized.		
P Power Type	2 W	2 W	3 W
Dimensions	16.5 mm × 12 mm × 7 mm	16.2 mm × 16.5 mm × 8.5 mm	38 mm × 9 mm × 14 mm
	The forming modes and length of lead wires can be customized.		
T_f Rated Functioning Temp.	(93 ~ 150) °C	(93 ~ 150) °C	(115 ~ 150) °C

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Glossary

Item	Description
RXF	A power resistor which is made by winding a resistive element on a ceramic core, and the core is coated by insulation coating. It intends to interrupt a current flow at a predetermined time when the current exceeds a predetermined value. — (SETsafe | SETfuse Standards)
ATCO	**Alloy Thermal-Link** Alloy Type Thermal-Link, Alloy is the thermal element. — (GB/T 9816.3)
R	**Rated Resistance** Resistance value for which the resistor has been designed, and which is generally used for denomination of the resistor. — (IEC60115-1)
U_N	**Rated Voltage** The d.c. or a.c. r.m.s. voltage calculated from the square root of the product of the rated resistance and the rated dissipation. — (IEC60115-1)
T_f	**Rated Functioning Temp.** The temp. of the Alloy Thermal-Link which causes it to change the state of conductivity with a detection current up to 10 mA as the only load. Tolerance: T_f + 0 / -10 °C (GB 9816.1, EN 60691, K60691) Tolerance: T_f ± 7 °C (J60691) — (IEC 60691)
T_F	**Fusing Temp.** The temp. of the Alloy Thermal-Link which causes it to change its state of conductivity is measured with silicone oil bath in which the temp. is increased at the rate of 0.5 °C to 1 °C / minute, with a detection current up to 10 mA as the only load. — (IEC 60691)
TCR	**Temp. Coefficient of Resistance** Relative variation of resistance between two given temp. divided by the difference in the temp. producing it. — (IEC60115-1)

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ATTENTION

Cold Resistance Test

1. If product TCR is not less than 350 (10^{-6}/°C), the measured resistance value shall be corrected as the relative resistance value under 25 °C according to TCR formula.
2. Resistance Measurement (4-terminal test)

Replacement

As TPR is a non-resettable product, for safety sake, please use the same type of TPR for replacement.

Usage

1. Do not touch the resistor body or pins directly when power is on, to avoid burn or electric shock.
2. When air pressure is from 80 kPa to 106 kPa, the relative altitude shall be +2000 m to - 500 m.

Storage

1. Please store TPR with ambient temp. 10 °C ~ 30 °C and relative humidity 30% ~ 75%.
2. Do not store the TPR at the high temp., high humidity or corrosive gas environment, avoid influencing the solderability of the pins, please use them up within 1 year after receiving the goods.

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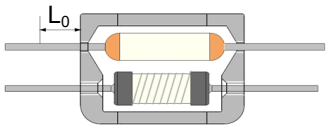
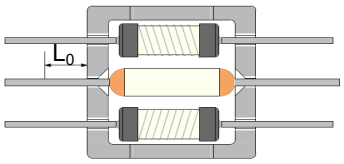
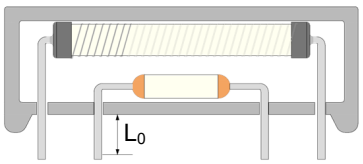
Soldering Parameters

Recommended Hand-Soldering Parameters

Series	Max. Allowable Soldering Time (s)			Soldering Temp. (°C)	Legend
	Length of Lead Wire (L_0)				
	10 mm	20 mm	30 mm		
TPRC	2	4	6	400	
TPRC-2	2	4	6	400	
Series	**Length of Lead Wire (L_0)**			**Soldering Temp. (°C)**	**Legend**
	3.5 mm	**4.5 mm**	**5.5 mm**		
TPRD	3	4	6	400	

Remark: Auxiliary heat sink fixture is required to avoid Thermal-Link cutting off unexpectedly.

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TPR (Active Protection)

Thermally Protected Resistor (Active Protection)

Operating Principle

- **TPRC Series**

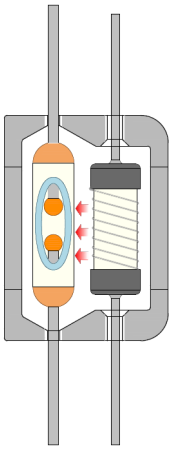
Instruction

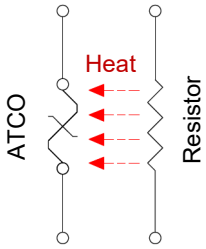
$R_{RXF} \geq 100R_{ATCO}$

- R_{RXF}: the resistance value of RXF
- R_{ATCO}: the resistance value of the Alloy Thermal-Link (ATCO)

$T_{RXF} \geq 5T_{ATCO}$

- The Fusing Temp. of ATCO (T_{ATCO}): 93 °C ~ 150 °C





- **TPRC-2 Series**

Instruction

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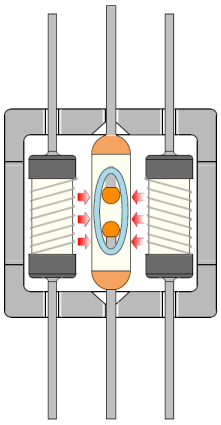
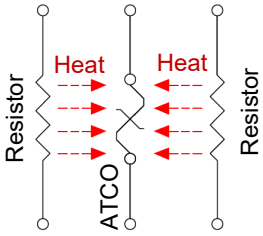
- R_{ATCO}: the resistance value of the Alloy Thermal-Link (ATCO)

$T_{RXF} \geq 5T_{ATCO}$

- The Fusing Temp. of ATCO (T_{ATCO}): 93 °C ~ 150 °C





- **TPRD Series**

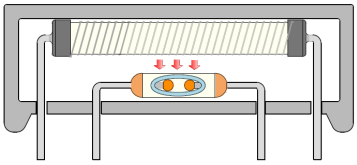
Instruction

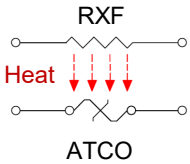
$R_{RXF} \geq 100R_{ATCO}$

- R_{RXF}: the resistance value of RXF
- R_{ATCO}: the resistance value of the Alloy Thermal-Link (ATCO)

$T_{RXF} \geq 5T_{ATCO}$

- The Fusing Temp. of ATCO (T_{ATCO}): 115 °C ~ 150 °C





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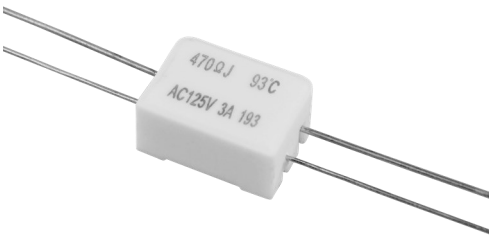
TPR (Active Protection)

Thermally Protected Resistor (Active Protection)

TPRC Series



Description

SETsafe | SETfuseThermally Protected Resistor (TPR) is an unique type of Power Resistor, with Over Temp. and Over Current Protections. Thermally Protected Resistor (TPR) is a type of power resistor, where Alloy Thermal-Link (ATCO) and Fusible Wirewound Resistor (RXF) in a ceramic case with silicone cement.

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SETsafe | SETfuse TPR is not only able to proceed over temp. protection by ATCO itself but also proceed over current protection by RXF transferring heat to ATCO to open the circuit. TPRC series Rated Resistance from 0.27 Ω to 1,000 Ω, Rated Functioning Temp. from 93 °C to 150 °C, complies with RoHS and REACH.

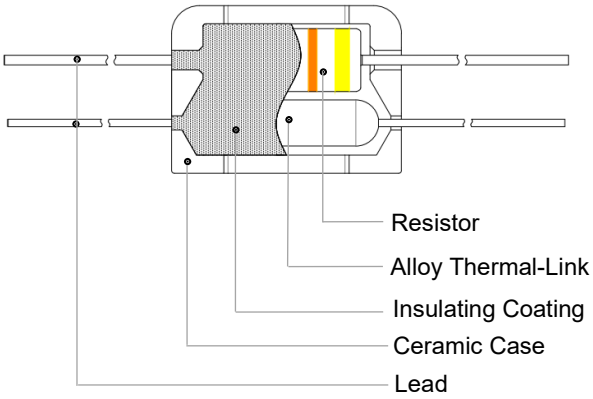
Features

- Over Temp. Protection
- Over Current Protection
- Inrush Current Protection
- RoHS & REACH Compliant

Applications

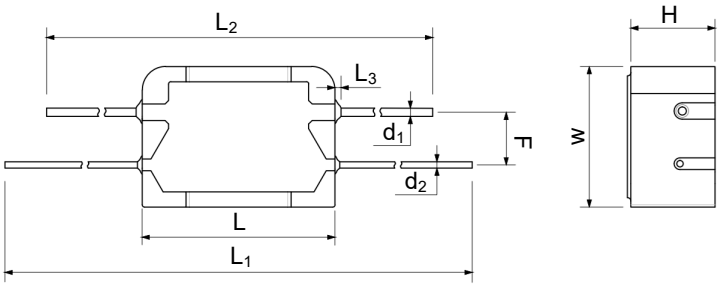
- LED Drivers
- Electric Blanket
- Industrial Equipment

Structure Diagrams



Note: The color of schematic diagram is for reference only

Dimensions（mm）



L	W	H	F[a]	L_1
16.5 ± 0.5	12.0 ± 0.5	7.0 Max.	4.5 ± 0.5	80 ± 3
L_2	L_3	d_1	d_2	-
60 ± 2	1.0 Max.	Φ0.70 ± 0.05	Φ0.54 ± 0.05	-

Note: a - F can meet (4.5 ± 0.5) mm within 1 mm from the body. The forming modes and length of length of lead wires can be customized.

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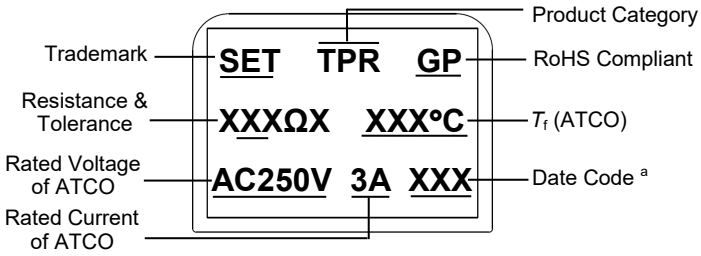
Marking



Note:
a: The first XX means production year code,
The last X means production quarter code.
eg: "241" means that the production time is the first quarter of Y2024.

Part Numbering System

TPR C - 4R7 J 41 F B H - 001

Other Options

Shape

H:	Horizontal Installation

Shape

B :	Square

Pin Type

F :	4 pins

ATCO Code

39:	93 °C	44:	130 °C
41:	102 °C	45:	135 °C
42:	115 °C	46:	145 °C
43:	125 °C	47:	150 °C

Resistance Tolerance

J :	±5%	K :	±10%

Rated Resistance (Ω)

R47 :	0.47	47R :	47
4R7 :	4.7	470R :	470

Power Type

C:	2 W

Product Category

Technical Parameter

Item	Parameter
Power Type (***P***)	2 W
Rated Resistance (***R***)	0.27 Ω ~ 1,000 Ω
Resistance Tolerance	5% (E24) , 10% (E12)
Rated Voltage	$U_N = \sqrt{P \times R}$
Rated Current of ATCO	3 A
Rated Voltage of ATCO	125 VAC, 250 VAC
Maximum Fusing Current	Current that Correspond to 60 W
Fusing Time (less than 60 seconds)	20 W, (93 °C , 102 °C)
	25 W, (115 °C ≤ T_f ≤ 135 °C)
	30 W, (145 °C ≤ T_f ≤ 150 °C)
Rated Functioning Temp. (T_f)	93 °C, 102 °C, 115 °C, 125 °C, 130 °C, 135 °C, 145 °C, 150 °C
Fusing Temp. (T_F)	See Specifications
Surge (For Reference) **Note: Combination Wave**	2.0 kV (R > 10 Ω)
	1.0 kV (R ≤ 10 Ω)

Agency Approvals of RXF

Rated Power	Resistance Range	Agency Information		
		cURus	VDE	CQC
(W)	(Ω)	cURus	VDE	CQC
2	3 to 68	●	●	●
	0.27 to 1,000	●	●	N/A

Agency Approvals of ATCO

Code	Model	Rated Functioning Temp.	Agency Information				
			cURus	TUV	PSE	CCC	KC
		(°C)	cURus	TUV	PSE	CCC	KC
47	B7	150	●	●	N/A	●	N/A
46	B6	145	●	●	●	●	●
45	B5	135	●	●	●	●	●
44	B4	130	●	●	●	●	●
43	B3	125	●	●	●	●	●
42	B2	115	●	●	●	●	●
41	B1	102	●	●	●	●	●

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Specifications

Model	Power Type	Rated Functioning Temp. (T_f)	Fusing Temp. (T_F)	Resistance Range (R)	Resistance Tolerance	Environmental Status	
						RoHS	REACH
	(W)	(°C)	(°C)	(Ω)	(%)		
TPRC-xxxx47FB	2	150	143 ~ 150	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-xxxx46FB	2	145	138 ~ 145	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-xxxx45LB	2	135	128 ~ 135	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-xxxx44LB	2	130	123 ~ 130	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-xxxx43LB	2	125	119 ~ 125	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-xxxx42FB	2	115	109 ~ 115	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-xxxx41FB	2	102	96 ~ 102	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-xxxx39FB	2	93	87 ~ 93	0.27 ~ 1,000	±5 / ±10	●	●

Note: ”●"Means certificated, RoHS & REACH Compliant. Blue Font Is SETsafe | SETfuse Common Specifications

Resistance Selection Table (According to IEC60063-2015 E24)

Rated Resistance (Ω)	Code	Rated Resistance (Ω)	Code	Rated Resistance (Ω)	Code	Rated Resistance (Ω)	Code
0.10	R10	1.0	1R0	10	10R	100	100R
0.11	R11	1.1	1R1	11	11R	110	110R
0.12	R12	1.2	1R2	12	12R	120	120R
0.13	R13	1.3	1R3	13	13R	130	130R
0.15	R15	1.5	1R5	15	15R	150	150R
0.16	R16	1.6	1R6	16	16R	160	160R
0.18	R18	1.8	1R8	18	18R	180	180R
0.20	R20	2.0	2R0	20	20R	200	200R
0.22	R22	2.2	2R2	22	22R	220	220R
0.24	R24	2.4	2R4	24	24R	240	240R
0.27	R27	2.7	2R7	27	27R	270	270R
0.30	R30	3.0	3R0	30	30R	300	300R
0.33	R33	3.3	3R3	33	33R	330	330R
0.36	R36	3.6	3R6	36	36R	360	360R
0.39	R39	3.9	3R9	39	39R	390	390R
0.43	R43	4.3	4R3	43	43R	430	430R
0.47	R47	4.7	4R7	47	47R	470	470R
0.51	R51	5.1	5R1	51	51R	510	510R
0.56	R56	5.6	5R6	56	56R	560	560R
0.62	R62	6.2	6R2	62	62R	620	620R
0.68	R68	6.8	6R8	68	68R	680	680R
0.75	R75	7.5	7R5	75	75R	750	750R
0.82	R82	8.2	8R2	82	82R	820	820R
0.91	R91	9.1	9R1	91	91R	910	910R

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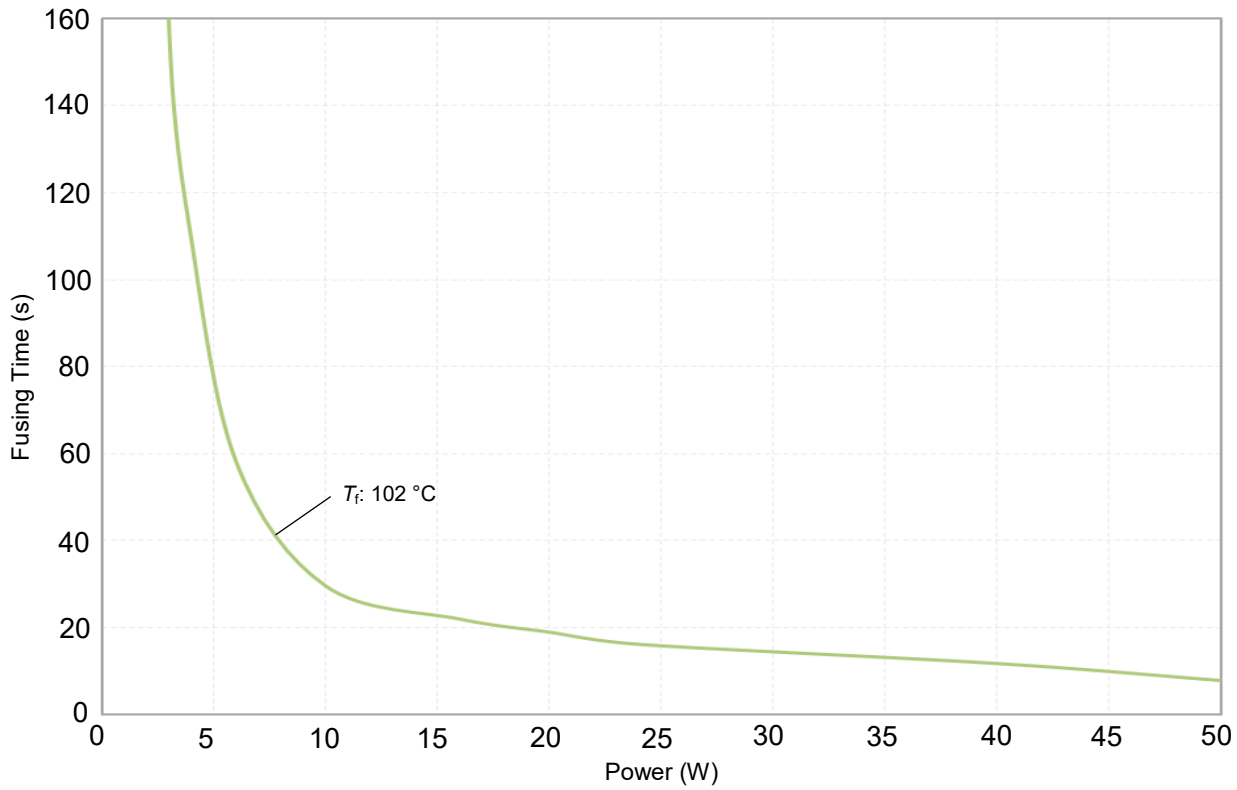
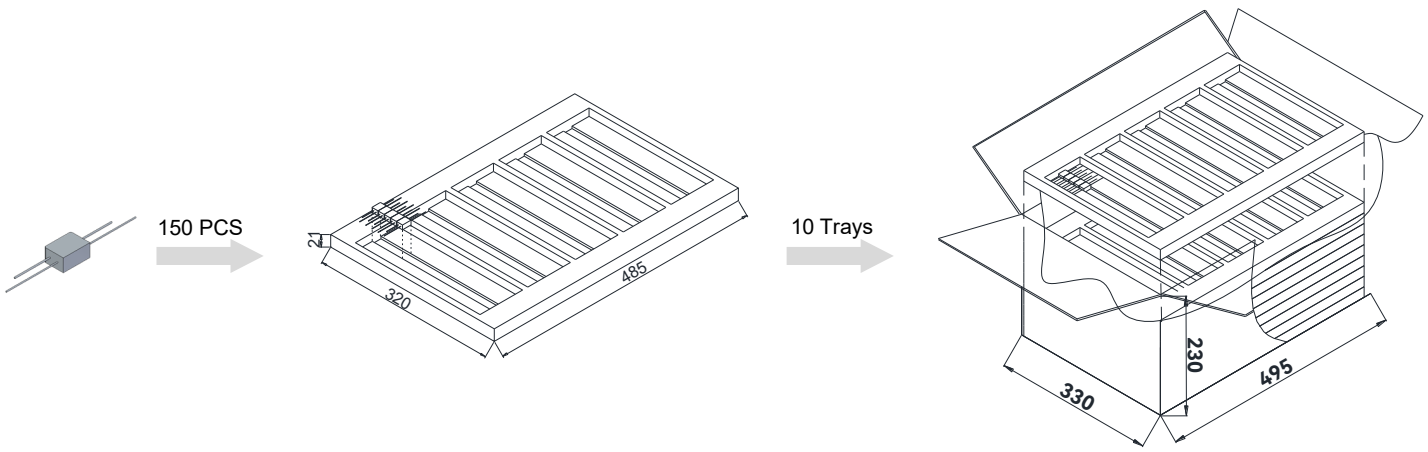
Fusing Time Curve (For Reference Only)

TPR can open effectively at lower power multiples to protect the circuit timely (ambient temp.: 25 °C ± 2°C).



Packaging Information (For Reference Only)

Item	EPE Tray	Carton
Dimension	485 × 320 × 21	495 × 330 × 230
Quantity (PCS)	150	1,500
Gross Weight (kg)		6.5 ± 10%



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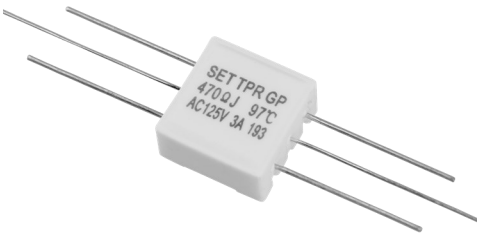
TPR (Active Protection)

Thermally Protected Resistor (Active Protection)

TPRC-2 Series



Description

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Features

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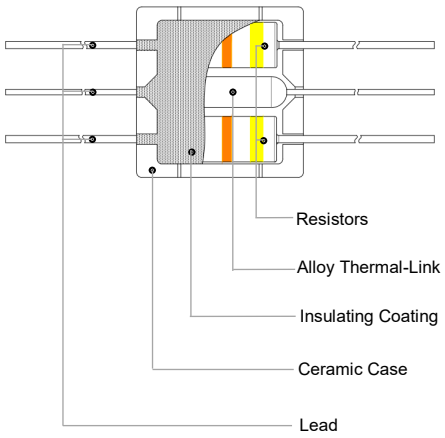
- Over Current Protection
- Inrush Current Protection
- RoHS & REACH Compliant

Applications

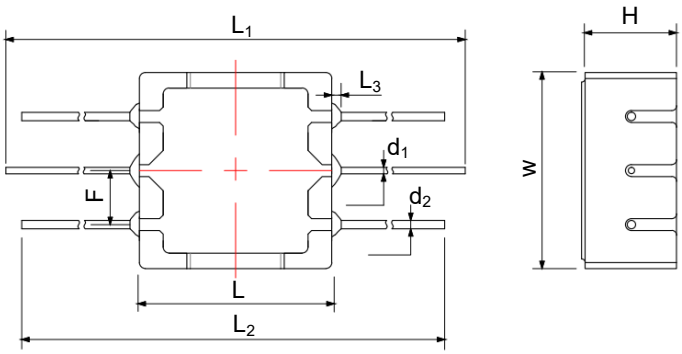
- LED Drivers
- Electric Blanket
- Industrial Equipment

Structure Diagrams



Note: The color of schematic diagram is for reference only

Dimensions（mm）



L	W	H	F[a]	L_1
16.2 ± 0.5	16.5 ± 0.5	8.5 Max.	4.5 ± 0.5	80 ± 3
L_2	L_3	d_1	d_2	-
60 ± 2	1.0 Max.	Φ0.70 ± 0.10	Φ0.54 ± 0.05	-

Note: a - F can meet (4.5 ± 0.5) mm within 1 mm from the body. The forming modes and length of length of lead wires can be customized.

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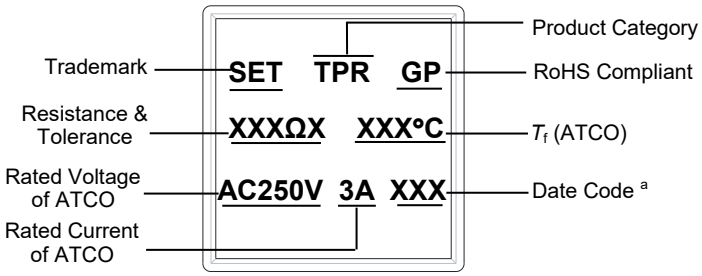
Marking



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a: The first XX means production year code,
The last X means production quarter code.
eg: "241" means that the production time is the first quarter of Y2024.

Part Numbering System

TPR C - 2 - 4R7 J 41 G B H - 001

Other Options

Shape

H:	Horizontal Installation

Shape

B :	Square

Pin Type

G :	6 pins

ATCO Code

39:	93 °C	44:	130 °C
41:	102 °C	45:	135 °C
42:	115 °C	46:	145 °C
43:	125 °C	47:	150 °C

Resistance Tolerance

J :	±5%	K :	±10%

Rated Resistance (Ω)

R47 :	0.47	47R :	47
4R7 :	4.7	470R :	470

Number of Resistor

2:	2

Power Type

C:	2 W

Product Category

Technical Parameter

Item	Parameter
Power Type (***P***)	2 W
Rated Resistance (***R***)	0.27 Ω ~ 1,000 Ω
Resistance Tolerance	5% (E24) , 10% (E12)
Rated Voltage	$U_N = \sqrt{P \times R}$
Rated Current of ATCO	3 A
Rated Voltage of ATCO	125 VAC, 250 VAC
Maximum Fusing Current	Current that Correspond to 60 W
Fusing Time (less than 60 seconds)	20 W, (93 °C , 102 °C)
	25 W, (115 °C ≤ T_f ≤ 135 °C)
	30 W, (145 °C ≤ T_f ≤ 150 °C)
Rated Functioning Temp. (T_f)	93 °C, 102 °C, 115 °C, 125 °C, 130 °C, 135 °C, 145 °C, 150 °C
Fusing Temp. (T_F)	See Specifications
Surge (For Reference) **Note: Combination Wave**	2.0 kV (R > 10 Ω)
	1.0 kV (R ≤ 10 Ω)

Agency Approvals of RXF

Rated Power	Resistance Range	Agency Information		
		cURus	VDE	CQC
(W)	(Ω)	cURus	VDE	CQC
2	3 to 68	●	●	●
	0.27 to 1,000	●	●	N/A

Agency Approvals of ATCO

Code	Model	Rated Functioning Temp.	Agency Information				
			cURus	TUV	PSE	CCC	KC
		(°C)	cURus	TUV	PSE	CCC	KC
47	B7	150	●	●	N/A	●	N/A
46	B6	145	●	●	●	●	●
45	B5	135	●	●	●	●	●
44	B4	130	●	●	●	●	●
43	B3	125	●	●	●	●	●
42	B2	115	●	●	●	●	●
41	B1	102	●	●	●	●	●

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Specifications

Model	Power Type	Rated Functioning Temp. (T_f)	Fusing Temp. (T_F)	Resistance Range (R)	Resistance Tolerance	Environmental Status	
						RoHS	REACH
	(W)	(°C)	(°C)	(Ω)	(%)		
TPRC-2-xxxx47FB	2	150	143 ~ 150	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-2-xxxx46FB	2	145	138 ~ 145	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-2-xxxx45LB	2	135	128 ~ 135	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-2-xxxx44LB	2	130	123 ~ 130	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-2-xxxx43LB	2	125	119 ~ 125	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-2-xxxx42FB	2	115	109 ~ 115	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-2-xxxx41FB	2	102	96 ~ 102	0.27 ~ 1,000	±5 / ±10	●	●
TPRC-2-xxxx39FB	2	93	87 ~ 93	0.27 ~ 1,000	±5 / ±10	●	●

Note: ”●"Means certificated, RoHS & REACH Compliant. Blue Font Is SETsafe | SETfuse Common Specifications

Resistance Selection Table (According to IEC60063-2015 E24)

Rated Resistance (Ω)	Code	Rated Resistance (Ω)	Code	Rated Resistance (Ω)	Code	Rated Resistance (Ω)	Code
0.10	R10	1.0	1R0	10	10R	100	100R
0.11	R11	1.1	1R1	11	11R	110	110R
0.12	R12	1.2	1R2	12	12R	120	120R
0.13	R13	1.3	1R3	13	13R	130	130R
0.15	R15	1.5	1R5	15	15R	150	150R
0.16	R16	1.6	1R6	16	16R	160	160R
0.18	R18	1.8	1R8	18	18R	180	180R
0.20	R20	2.0	2R0	20	20R	200	200R
0.22	R22	2.2	2R2	22	22R	220	220R
0.24	R24	2.4	2R4	24	24R	240	240R
0.27	R27	2.7	2R7	27	27R	270	270R
0.30	R30	3.0	3R0	30	30R	300	300R
0.33	R33	3.3	3R3	33	33R	330	330R
0.36	R36	3.6	3R6	36	36R	360	360R
0.39	R39	3.9	3R9	39	39R	390	390R
0.43	R43	4.3	4R3	43	43R	430	430R
0.47	R47	4.7	4R7	47	47R	470	470R
0.51	R51	5.1	5R1	51	51R	510	510R
0.56	R56	5.6	5R6	56	56R	560	560R
0.62	R62	6.2	6R2	62	62R	620	620R
0.68	R68	6.8	6R8	68	68R	680	680R
0.75	R75	7.5	7R5	75	75R	750	750R
0.82	R82	8.2	8R2	82	82R	820	820R
0.91	R91	9.1	9R1	91	91R	910	910R

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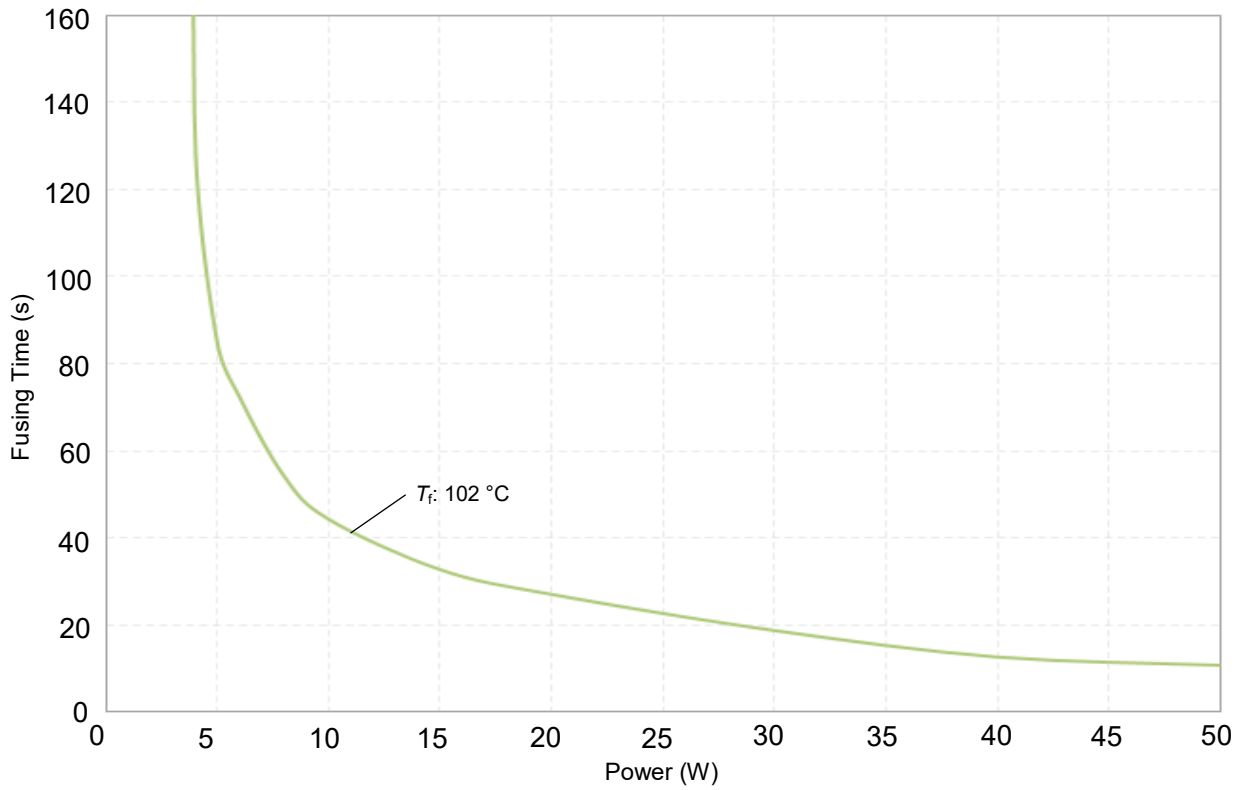
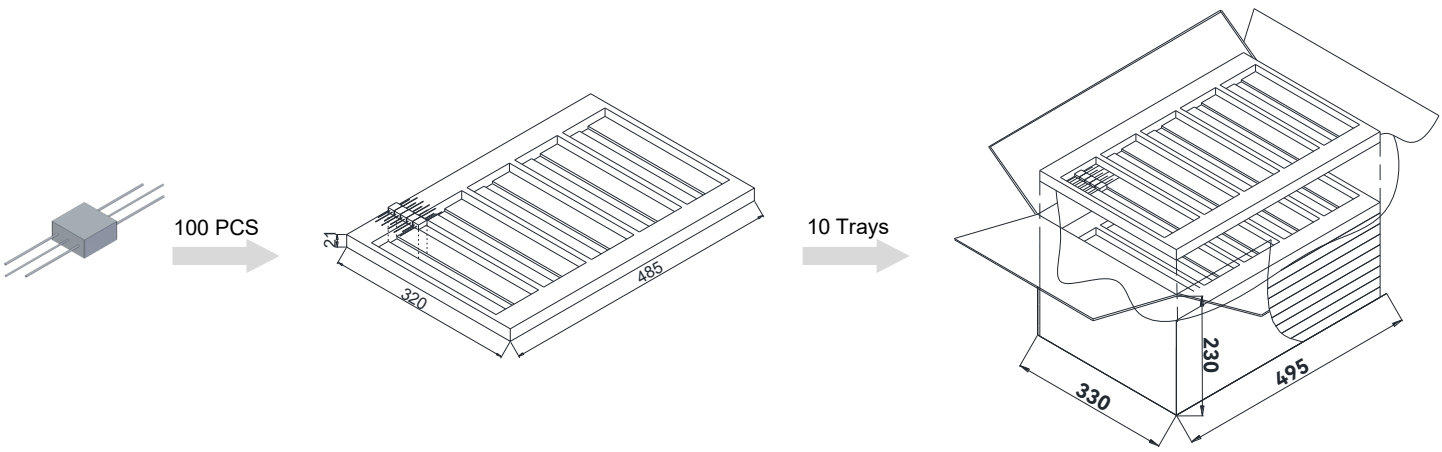
Fusing Time Curve (For Reference Only)

TPR can open effectively at lower power multiples to protect the circuit timely (ambient temp.: 25 °C ± 2°C).



Packaging Information (For Reference Only)

Item	EPE Tray	Carton
Dimension	485 × 320 × 21	495 × 330 × 230
Quantity (PCS)	100	1,000
Gross Weight (kg)		6.5 ± 10%



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TPR (Active Protection)

Thermally Protected Resistor (Active Protection)

TPRD Series

Description

SETsafe | SETfuseThermally Protected Resistor (TPR) is an unique type of Power Resistor, with Over Temp. and Over Current Protections. Thermally Protected Resistor (TPR) is a type of power resistor, where Alloy Thermal-Link (ATCO) and Fusible Wirewound Resistor (RXF) in a ceramic case with silicone cement.

TPR is widely used in products such as LED drivers, electric blanket, industrial equipment.

SETsafe | SETfuse TPR is not only able to proceed over temp. protection by ATCO itself but also proceed over current protection by RXF transferring heat to ATCO to open the circuit. TPRD series Rated Resistance from 0.27 Ω to 1,000 Ω, Rated Functioning Temp. from 115 °C to 150 °C .complies with RoHS and REACH.

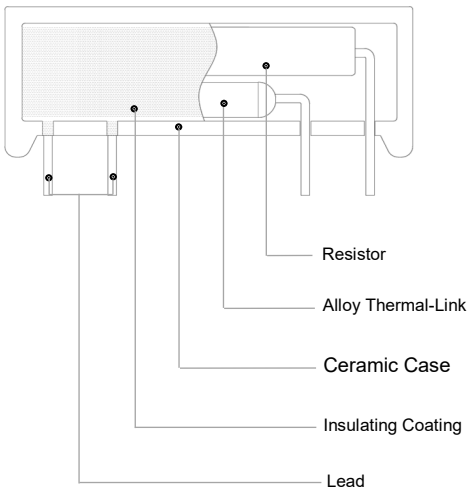
Features

- Over Temp. Protection
- Over Current Protection
- Inrush Current Protection
- RoHS & REACH Compliant

Applications

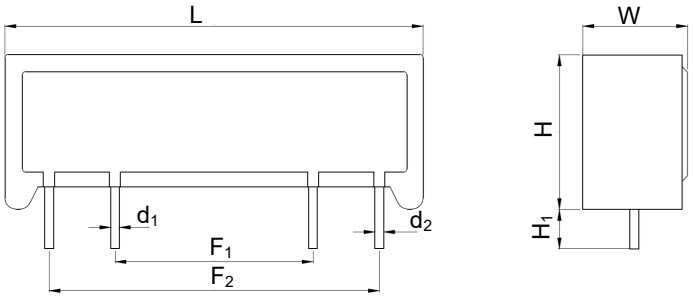
- LED Drivers
- Electric Blanket
- Industrial Equipment

Structure Diagrams



Note: The color of schematic diagram is for reference only

Dimensions（mm）



L	W	H	H_1	F_1[a]
38 ± 1	9 ± 1	14 ± 1	3.5 ± 0.8	18.0 ± 1.0
F_2[a]	d_1	d_2	-	-
30.4 ± 1.0	Φ0.54 ± 0.05	Φ0.75 ± 0.05	-	-

Note: a - The forming modes and length of length of lead wires can be customized.

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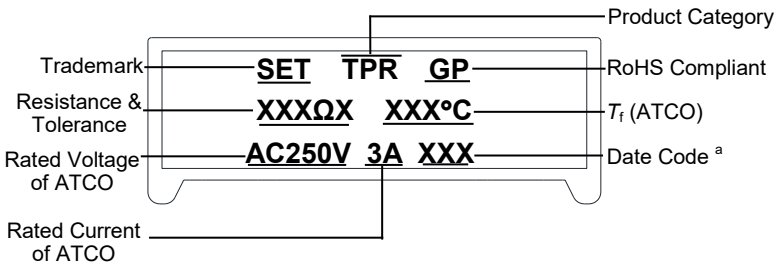
Marking



Note:
a: The first XX means production year code,
The last X means production quarter code.
eg: "241" means that the production time is the first quarter of Y2024.

Part Numbering System

TPR D - 4R7 J 26 F B H - 001

Other Options

Shape

H:	Horizontal Installation

Shape

B :	Square

Pin Type

G :	6 pins

ATCO Code

22:	115 °C	25:	135 °C
23:	125 °C	26:	145 °C
24:	130 °C	27:	150 °C

Resistance Tolerance

J :	±5%	K :	±10%

Rated Resistance (Ω)

R47 :	0.47	47R :	47
4R7 :	4.7	470R :	470

Power Type

D:	3 W

Product Category

Technical Parameter

Item	Parameter
Power Type (***P***)	3 W
Rated Resistance (***R***)	0.27 Ω ~ 1,000 Ω
Resistance Tolerance	5% (E24) , 10% (E12)
Rated Voltage	$U_N = \sqrt{P \times R}$
Rated Current of ATCO	2 A
Rated Voltage of ATCO	125 VAC, 250 VAC
Maximum Fusing Current	Current that Correspond to 60 W
Fusing Time (less than 60 seconds)	35 W, (115 °C ≤ T_f ≤ 135 °C,)
	40 W, (145 °C ≤ T_f ≤ 150 °C,)
Rated Functioning Temp. (T_f)	115 °C, 125 °C, 130 °C, 135 °C, 145 °C, 150 °C
Fusing Temp. (T_F)	See Specifications
Surge (For Reference) **Note: Combination Wave**	2.5 kV (R > 10 Ω)
	2 kV (R ≤ 10 Ω)

Agency Approvals of ATCO

Code	Model	Rated Functioning Temp.	Agency Information				
			cURus	TUV	PSE	CCC	KC
		(°C)	cURus	TUV	PSE	CCC	KC
27	H7	150	●	●	●	●	●
26	H6	145	●	●	●	●	●
25	H5	135	●	●	●	●	●
24	H4	130	●	●	●	●	●
23	H3	125	●	●	●	●	●
22	H2	115	●	●	●	●	●

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Specifications

Model	Power Type	Rated Functioning Temp. (T_f)	Fusing Temp. (T_F)	Resistance Range (R)	Resistance Tolerance	Environmental Status	
						RoHS	REACH
	(W)	(°C)	(°C)	(Ω)	(%)		
TPRD-xxxx27FB	3	150	143 ~ 150	0.27 ~ 1,000	±5 / ±10	●	●
TPRD-xxxx26FB	3	145	138 ~ 145	0.27 ~ 1,000	±5 / ±10	●	●
TPRD-xxxx25LB	3	135	128 ~ 135	0.27 ~ 1,000	±5 / ±10	●	●
TPRD-xxxx24LB	3	130	123 ~ 130	0.27 ~ 1,000	±5 / ±10	●	●
TPRD-xxxx23LB	3	125	119 ~ 125	0.27 ~ 1,000	±5 / ±10	●	●
TPRD-xxxx22FB	3	115	109 ~ 115	0.27 ~ 1,000	±5 / ±10	●	●

Note: ”●"Means certificated, RoHS & REACH Compliant. Blue Font Is SETsafe | SETfuse Common Specifications

Resistance Selection Table (According to IEC60063-2015 E24)

Rated Resistance (Ω)	Code	Rated Resistance (Ω)	Code	Rated Resistance (Ω)	Code	Rated Resistance (Ω)	Code
0.10	R10	1.0	1R0	10	10R	100	100R
0.11	R11	1.1	1R1	11	11R	110	110R
0.12	R12	1.2	1R2	12	12R	120	120R
0.13	R13	1.3	1R3	13	13R	130	130R
0.15	R15	1.5	1R5	15	15R	150	150R
0.16	R16	1.6	1R6	16	16R	160	160R
0.18	R18	1.8	1R8	18	18R	180	180R
0.20	R20	2.0	2R0	20	20R	200	200R
0.22	R22	2.2	2R2	22	22R	220	220R
0.24	R24	2.4	2R4	24	24R	240	240R
0.27	R27	2.7	2R7	27	27R	270	270R
0.30	R30	3.0	3R0	30	30R	300	300R
0.33	R33	3.3	3R3	33	33R	330	330R
0.36	R36	3.6	3R6	36	36R	360	360R
0.39	R39	3.9	3R9	39	39R	390	390R
0.43	R43	4.3	4R3	43	43R	430	430R
0.47	R47	4.7	4R7	47	47R	470	470R
0.51	R51	5.1	5R1	51	51R	510	510R
0.56	R56	5.6	5R6	56	56R	560	560R
0.62	R62	6.2	6R2	62	62R	620	620R
0.68	R68	6.8	6R8	68	68R	680	680R
0.75	R75	7.5	7R5	75	75R	750	750R
0.82	R82	8.2	8R2	82	82R	820	820R
0.91	R91	9.1	9R1	91	91R	910	910R

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Fusing Time Curve (For Reference Only)

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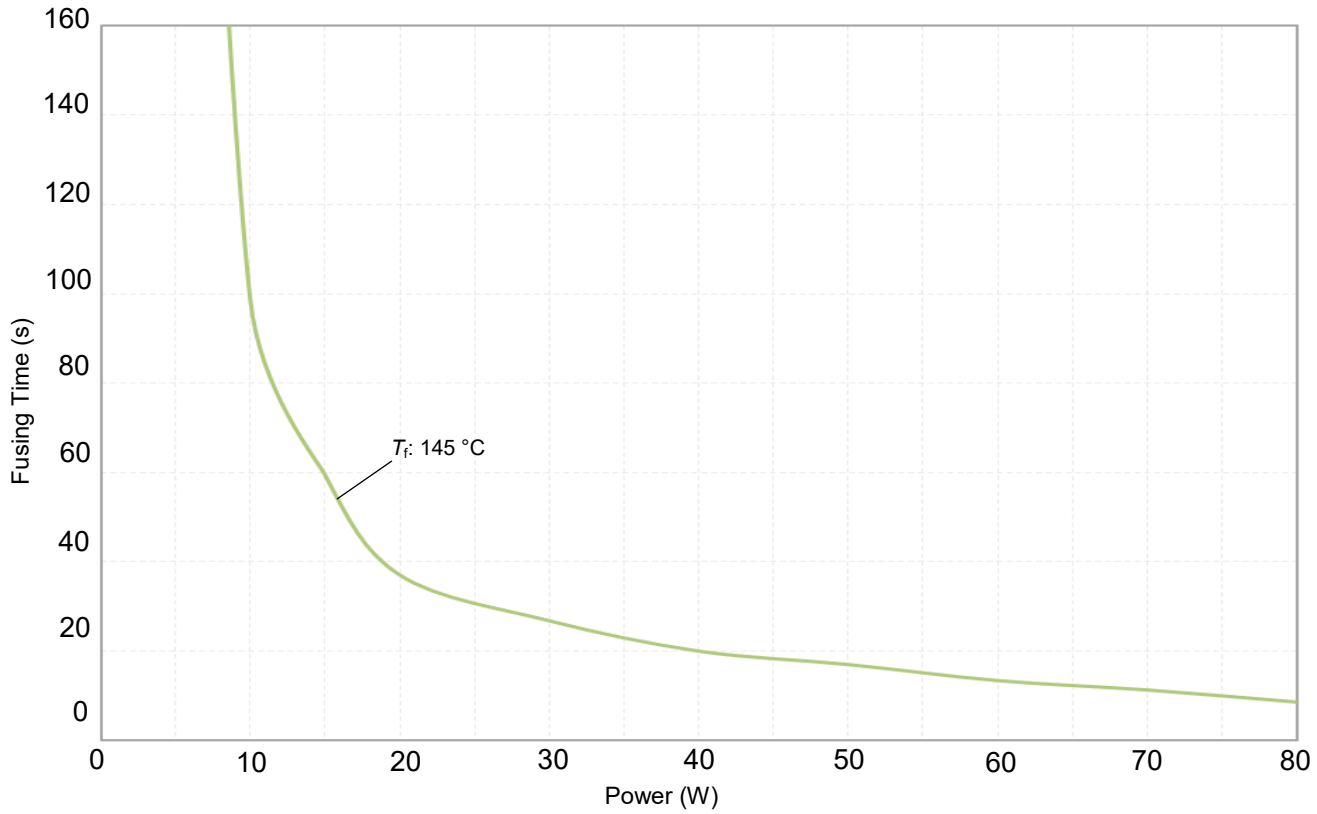
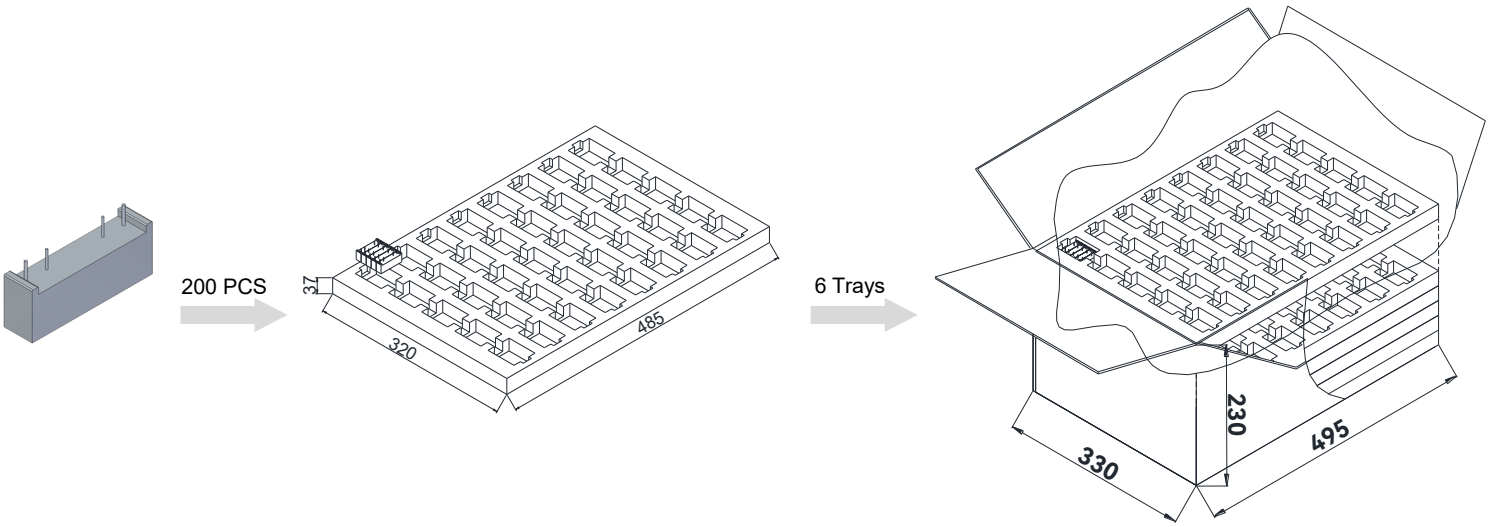


Packaging Information (For Reference Only)

Item	EPE Tray	Carton
Dimension	485 × 320 × 37	495 × 330 × 230
Quantity (PCS)	200	1,200
Gross Weight (kg)		12 ± 10%



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20+

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