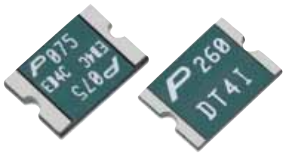
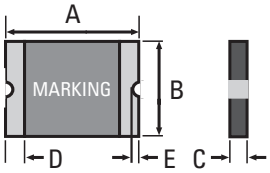
SMD2920 / No. 730

Surface Mount, 6V-60V

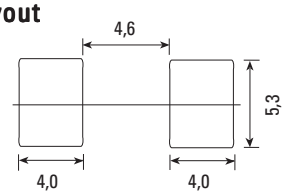


Dimensions (mm)



Chip Size 2920

Pad Layout



Approvals

UL Recognized: File No. E201431
CSA Accepted: File No. CA11375-1
TÜV: File No. R9956421

Features

Low voltage (up to 60Vdc) overcurrent protection
Reduced PCB space requirements
Low resistance and power dissipation
Internationally approved

For high density PCB applications, including computers, telecommunications and industrial electronics

WebLinks

Data Sheet

www.wickmannusa.com/products/730.pdf

Packaging

www.wickmannusa.com/pack

Specifications

Packaging

00: Blister Tape (Qty.: see table below)

Materials

Terminals: Solder-plated copper
Plating: 63/37 SnPb

Device Surface Temperature in Tripped State

125°C Max.

Operating / Storage Temperature

-40°C to +85°C (see de-rating table)

Humidity Ageing

+85°C, 85% RH, 1000 hrs., ± 5% typical resistance change

Passive Ageing

+85°C, 1000 hrs., ± 5% typical resistance change

Vibration

MIL-STD-883C, Method 2007.1, Condition A, no change

Thermal Shock

+85°C to -40°C, 20 times, -30% typical resistance change (MIL-STD-202F, Method 107G)

Solvent Resistance

MIL-STD-202, Method 215, no change

Solderability

EIA Specification RS186-9E, ANSI/J-STD-002 Category 3

Marking

"*P*", Current Code

Dimensions Legend						Packaging Quantity
Rating	A min./max.	B min./max.	C min./max.	D min.	E min./max.	Blister Tape
300 mA / 60V	6.73 / 7.98	4.80 / 5.44	0.75 / 1.25	0.30	0.25 / 2.00	1500
500 mA / 60V	6.73 / 7.98	4.80 / 5.44	0.75 / 1.25	0.30	0.25 / 2.00	1500
750 mA / 30V	6.73 / 7.98	4.80 / 5.44	0.75 / 1.25	0.30	0.25 / 2.00	1500
1.10 A / 33V	6.73 / 7.98	4.80 / 5.44	0.55 / 1.00	0.30	0.25 / 2.00	2000
1.25 A / 15V	6.73 / 7.98	4.80 / 5.44	0.55 / 1.00	0.30	0.25 / 2.00	2000
1.50 A / 33V	6.73 / 7.98	4.80 / 5.44	0.75 / 1.25	0.30	0.25 / 2.00	1500
1.85 A / 33V	6.73 / 7.98	4.80 / 5.44	0.75 / 1.25	0.30	0.25 / 2.00	1500
2.00 A / 15V	6.73 / 7.98	4.80 / 5.44	0.75 / 1.25	0.30	0.25 / 2.00	1500
2.00 A / 24V	6.73 / 7.98	4.80 / 5.44	0.75 / 1.25	0.30	0.25 / 2.00	1500
2.50 A / 15V	6.73 / 7.98	4.80 / 5.44	0.75 / 1.25	0.30	0.25 / 2.00	1500
2.60 A / 6V	6.73 / 7.98	4.80 / 5.44	0.55 / 1.00	0.30	0.25 / 2.00	2000
3.00 A / 6V	6.73 / 7.98	4.80 / 5.44	0.75 / 1.25	0.30	0.25 / 2.00	1500
3.00 A / 15V	6.73 / 7.98	4.80 / 5.44	0.75 / 1.25	0.30	0.25 / 2.00	1500

Permissible continuous operating current is ≤ 100% at ambient temperature of 20°C (68°F).

Hold Current I_{hold}	Model Code	Trip Current I_{trip} (A)	Voltage Rating (Vdc)	max. Fault Current $I_{max.}$ (A)	max. Power Dissipation P_d (W)	max. Time-to-trip (A)	(s)	Resistance $R_{min.}$ min. (Ω)	$R_{1max.}$ max. (Ω)	Model	Approvals UR	CSA	TÜV
300mA	03000	0.60	60	10	1.5	1.50	3.0	1.200	4.800	SMD2920P030TS	•	•	•
500mA	05000	1.00	60	10	1.5	2.50	4.0	0.350	1.400	SMD2920P050TS	•	•	•
750mA	07500	1.50	30	40	1.5	8.00	0.3	0.350	1.000	SMD2920P075TS	•	•	•
1.10A	11100	2.20	33	40	1.5	8.00	0.5	0.120	0.410	SMD2920P100TS	•	•	•
1.25A	11250	2.50	15	40	1.5	8.00	2.0	0.070	0.250	SMD2920P125TS	•	•	•
1.50A	11500	3.00	33	40	1.5	8.00	2.0	0.080	0.230	SMD2920P150TS	•	•	•
1.85A	11850	3.70	33	40	1.5	8.00	2.5	0.065	0.150	SMD2920P185TS	•	•	•
2.00A	12000	4.00	15	40	1.5	8.00	5.0	0.050	0.125	SMD2920P200TS	•	•	•
2.00A	12001	4.00	24	40	1.5	8.00	5.0	0.050	0.125	SMD2920P200TS/24	•	•	•
2.50A	12500	5.00	15	40	1.5	8.00	10.0	0.035	0.085	SMD2920P250TS	•	•	•
2.60A	12600	5.20	6	40	1.5	8.00	10.0	0.025	0.075	SMD2920P260TS	•	•	•
3.00A	13000	6.00	6	40	1.5	8.00	20.0	0.015	0.048	SMD2920P300TS	•	•	•
3.00A	13001	6.00	15	40	1.5	8.00	20.0	0.015	0.048	SMD2920P300TS/15	•	•	•

I_{hold} = Hold current: maximum current device will pass without tripping in 20°C still air.
I_{trip} = Trip current: minimum current at which the device will trip in 20°C still air.
V_{max} = Maximum voltage device can withstand without damage at rated current (I_{max}).
I_{max} = Maximum fault current device can withstand without damage at rated voltage (V_{max}).
P_d = Power dissipated from device when in the tripped state at 20°C still air.
R_{min} = Minimum resistance of device in initial (un-soldered) state.
R_{1max} = Maximum resistance of device at 20°C measured one hour after tripping.

Caution: Operation beyond the specified rating may result in damage and possible arcing and flame. Specifications are subject to change without notice.

Order Information	Qty.	Order-Number	Series	Model Code	Packaging
			730		

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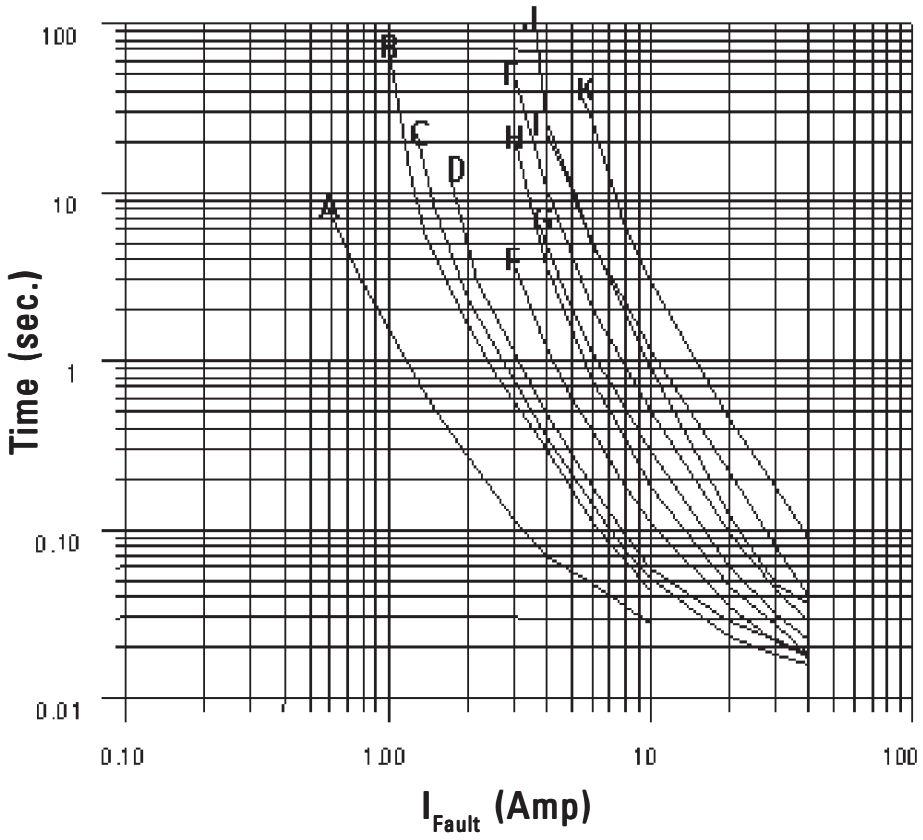
E-mail: sales@wickmann.com

• Americas Tel: +1 (404) 699-7820
E-mail: service@wickmannusa.com

• Asia Tel: +852 26 14-1108
E-mail: sales@wickmann.com.hk

SMD2920 / No. **730**

Time-to-trip Characteristics



Rating	Curve
300mA / 60V	A
500mA / 60V	B
750mA / 30V	C
1.10A / 33V	D
1.25A / 15V	E
1.50A / 33V	F
1.85A / 33V	G
2.00A / 15V	H
2.00A / 24V	*p*
2.50A / 15V	I
2.60A / 6V	J
3.00A / 6V	K
3.00A / 15V	*p*

P: pending

Thermal Derating Chart

Rating	I_{hold} (Amp) / Ambient Operating Temperature								
	-40°C	-20°C	0°C	23°C	40°C	50°C	60°C	70°C	85°C
300mA / 60V	0.45	0.40	0.35	0.30	0.25	0.23	0.20	0.17	0.14
500mA / 60V	0.76	0.67	0.59	0.50	0.42	0.38	0.33	0.29	0.23
750mA / 30V	1.13	1.01	0.88	0.75	0.62	0.56	0.50	0.44	0.34
1.10A / 33V	1.66	1.47	1.29	1.10	0.91	0.83	0.73	0.64	0.50
1.25A / 15V	1.89	1.68	1.46	1.25	1.04	0.94	0.83	0.73	0.56
1.50A / 33V	2.27	2.01	1.76	1.50	1.25	1.13	1.00	0.87	0.74
1.85A / 33V	2.80	2.47	2.17	1.85	1.54	1.39	1.22	1.07	0.85
2.00A / 15V	3.02	2.68	2.34	2.00	1.66	1.50	1.32	1.16	0.90
2.00A / 24V	P	P	P	P	P	P	P	P	P
2.50A / 15V	3.78	3.35	2.93	2.50	2.08	1.88	1.65	1.45	1.13
2.60A / 6V	3.64	3.25	2.91	2.60	2.26	2.08	1.95	1.74	1.48
3.00A / 6V	4.53	4.02	3.51	3.00	2.52	2.26	1.99	1.75	1.34
3.00A / 15V	P	P	P	P	P	P	P	P	P

P: pending

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