




Description

A30 Series radial leaded device is designed to provide overcurrent protection for low voltage ($\leq 30V$) applications where space is not a concern and resettable protection is preferred.

Features



- Cured, flame retardant epoxy polymer insulating material meets UL 94V-0 requirements
- Fast time-to-trip
- RoHS compliant, Lead-Free and Halogen-Free*

Agency Approvals

Agency	File Number
	E472196
	pending

Applications

- USB hubs, ports and peripherals
- Computers & peripherals
- Motor protection
- General electronics
- Automotive applications

Regulation	Standard
	2002/95/EC
	EN14582

Performance					Specification						
Model	V _{max} (V dc)	I _{max} (A)	I _{hold} @25°C (A)	I _{trip} @25°C (A)	P _d Typ. (W)	Maximum Time To Trip		Resistance			
						Current (A)	Time (Sec)	R _{i min} (Ω)	R _{i max} (Ω)	R _{1max} (Ω)	
A30-030	30	40	0.30	0.60	0.44	8.00	0.30	0.300	1.100	1.600	
A30-040	30	40	0.40	0.80	0.45	8.00	0.30	0.200	0.900	1.300	
A30-050	30	40	0.50	1.00	0.5	2.50	4.10	0.250	0.600	1.200	
A30-065	30	40	0.65	1.30	0.47	8.00	0.40	0.200	0.500	0.800	
A30-070	30	40	0.70	0.14	0.6	3.50	4.30	0.140	0.220	0.350	
A30-075	30	40	0.75	1.50	0.6	3.75	5.20	0.120	0.370	0.420	
A30-090	30	40	0.90	1.80	0.6	4.50	5.90	0.070	0.220	0.300	
A30-110	30	40	1.10	2.20	0.7	5.50	6.60	0.050	0.200	0.260	
A30-135	30	40	1.35	2.70	0.8	6.75	7.30	0.040	0.160	0.220	
A30-160	30	40	1.60	3.20	0.9	8.00	8.00	0.030	0.140	0.180	
A30-185	30	40	1.85	3.70	1.0	9.25	8.70	0.030	0.120	0.150	
A30-250	30	40	2.50	5.00	1.2	12.5	10.3	0.020	0.080	0.100	
A30-300	30	40	3.00	6.00	2.0	15.0	10.8	0.020	0.070	0.100	
A30-400	30	40	4.00	8.00	2.5	20.0	12.7	0.010	0.060	0.090	
A30-500	30	40	5.00	10.00	3.0	25.0	14.5	0.010	0.050	0.080	
A30-600	30	40	6.00	12.00	3.5	30.0	16.0	0.005	0.040	0.060	
A30-700	30	40	7.00	14.00	3.8	35.0	17.5	0.005	0.030	0.050	
A30-800	30	40	8.00	16.00	4.0	40.0	18.8	0.005	0.025	0.180	
A30-900	30	40	9.00	18.00	4.2	40.0	20.0	0.005	0.020	0.025	

I_{hold} = Hold Current. Maximum current device will not trip in 25°C still air.

I_{trip} = Trip Current. Minimum current at which the device will always trip in 25°C still air.

V_{max} = Maximum operating 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 dissipation when device is in the tripped state in 25°C still air environment at rated voltage. R

_{min/max} = Minimum/Maximum device resistance prior to tripping at 25°C.

R_{1max} = Maximum device resistance is measured one hour post reflow.

CAUTION : Operation beyond the specified ratings may result in damage and possible arcing and flame.

Environmental Specifications

Test	Conditions	Resistance change
Passive aging	+85°C, 1000 hrs.	±5% typical
Humidity aging	+85°C, 85% R.H. , 168 hours	±5% typical
Thermal shock	+85°C to -40°C, 20 times	±33% typical
Resistance to solvent	MIL-STD-202,Method 215	No change
Vibration	MIL-STD-202,Method 201	No change
Ambient operating conditions : - 40 °C to +85 °C		
Maximum surface temperature of the device in the tripped state is 125 °C		