JuLun

A16 Series PTC Devices

Description

A16 Series Radial Leaded PTCs are designed to provide resettable overcurrent protection serving a wide range of electronics applications. With maximum 16 voltage and maximum 100-ampere short circuit rating,they offer an ideal solution for USB protection.

Features

- 100A short circuit rating
- 16V Operating voltages
- Fast time-to-trip
- Meets all USB protection requirements
- RoHS compliant, Lead-Free and Halogen-Free*

Agency Approvals

Agency	File Number
c UL us	E472196
	pending

Regulation	Standard
RoHS	2002/95/EC
Halogen Free	EN14582

Applications

- Computers & peripherals
- Any USB applications
- Motor protection
- General Electronics

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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 ( )	R i max ( )	R1max ( )
A16-030	16	40	0.30	0.60	0.30	1.50	1.00	0.300	0.900	1.300
A16-050	16	40	0.50	1.00	0.40	2.50	1.10	0.200	0.500	0.760
A16-065	16	40	0.65	1.30	0.60	3.25	5.00	0.120	0.480	0.650
A16-075	16	40	0.75	1.50	0.30	3.75	4.80	0.100	0.320	0.400
A16-090	16	40	0.90	1.80	0.60	4.50	1.20	0.090	0.180	0.250
A16-110	16	40	1.10	2.20	0.70	5.50	2.30	0.060	0.150	0.240
A16-120	16	40	1.20	2.40	0.60	6.00	5.50	0.050	0.180	0.240
A16-135	16	40	1.35	2.70	0.80	6.75	4.50	0.040	0.130	0.190
A16-160	16	40	1.60	3.20	0.90	8.00	9.00	0.030	0.110	0.200
A16-185	16	40	1.85	3.70	1.00	9.25	10.0	0.030	0.100	0.160
A16-250	16	40	2.50	5.00	1.30	12.5	10.0	0.020	0.070	0.120
A16-300	16	40	3.00	5.10	2.30	15.0	2.00	0.020	0.070	0.110
A16-400	16	40	4.00	6.80	2.40	20.0	3.50	0.020	0.040	0.080
A16-500	16	40	5.00	8.50	2.60	25.0	3.60	0.014	0.025	0.033
A16-600	16	40	6.00	10.20	2.80	30.0	5.80	0.001	0.021	0.031
A16-700	16	40	7.00	11.90	3.00	35.0	8.00	0.008	0.015	0.022
A16-800	16	40	8.00	13.60	3.00	40.0	9.00	0.006	0.013	0.021
A16-900	16	40	9.00	15.30	3.30	45.0	12.0	0.004	0.012	0.018
A16-1000	16	40	10.00	17.00	3.60	50.0	12.5	0.004	0.011	0.015
A16-1100	16	40	11.00	18.70	3.70	55.0	13.5	0.003	0.009	0.013
A16-1200	16	40	12.00	20.40	4.20	60.0	16.0	0.003	0.008	0.012
A16-1400	16	100	14.00	23.80	4.60	70.0	20.0	0.003	0.007	0.011

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 (Imax).

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.

$R_{i\ min/max}$ = 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