

UBF RU30 Series (30V)

Electrical Characteristics

Part No Figure / Lead Option		I_{hold} (A)	I_{trip} (A)	V_{max} (V)	I_{max} (A)	$P_{d\ typ}$ (W)	Max. (A)	Time-to-trip (s)	R_{min} (Ω)	R_{1max} (Ω)
UBF RU30090	Fig. 1, \emptyset 0.51, Sn/CuFe	0.90	1.8	30	40	0.6	4.5	5.9	0.070	0.22
UBF RU30110	Fig. 1, \emptyset 0.51, Sn/CuFe	1.10	2.2	30	40	0.7	5.5	6.6	0.050	0.17
UBF RU30135	Fig. 1, \emptyset 0.51, Sn/CuFe	1.35	2.7	30	40	0.8	6.75	7.3	0.040	0.13
UBF RU30160	Fig. 1, \emptyset 0.51, Sn/CuFe	1.60	3.2	30	40	0.9	8.5	8.0	0.030	0.11
UBF RU30185	Fig. 1, \emptyset 0.51, Sn/CuFe	1.85	3.7	30	40	1.0	9.25	8.7	0.030	0.09
UBF RU30250	Fig. 1, \emptyset 0.51, Sn/CuFe	2.50	5.0	30	40	1.2	12.5	10.3	0.020	0.07
UBF RU30300	Fig. 2, \emptyset 0.81, Sn/Cu	3.0	6.0	30	40	2.0	15.0	10.8	0.020	0.08
UBF RU30400	Fig. 2, \emptyset 0.81, Sn/Cu	4.0	8.0	30	40	2.5	20.0	12.7	0.010	0.05
UBF RU30500	Fig. 2, \emptyset 0.81, Sn/Cu	5.0	10.0	30	40	3.0	25.0	14.5	0.010	0.05
UBF RU30600	Fig. 2, \emptyset 0.81, Sn/Cu	6.0	12.0	30	40	3.5	30.0	16.0	0.005	0.04
UBF RU30700	Fig. 2, \emptyset 0.81, Sn/Cu	7.0	14.0	30	40	3.8	35.0	17.5	0.005	0.03
UBF RU30800	Fig. 2, \emptyset 0.81, Sn/Cu	8.0	16.0	30	40	4.0	40.0	18.8	0.005	0.02
UBF RU30900	Fig. 2, \emptyset 0.81, Sn/Cu	9.0	18.0	30	40	4.2	45.0	20.0	0.005	0.02

I_{hold} : Hold current is the maximum current that **UBF Fuse** can pass through without interruption at 20°C unless otherwise specified.

I_{trip} : Trip current is the minimum current that will switch the device from low resistance state to high resistance state at 20°C unless specified.

V_{max} : The maximum voltage device can withstand without damage at rated current.

I_{max} : The maximum current device can withstand without damage at rated voltage.

P_d : The power dissipated from device when in the tripped state at 20°C unless otherwise specified.

R_{min} : The minimum resistance of device as received from the factory at 20°C unless otherwise specified.

R_{max} : The maximum resistance of device as received from the factory at 20°C unless otherwise specified.

R_{1max} : The maximum resistance of device when measured one hour post trip at 20°C unless otherwise specified.

Max. Time-to-trip: The maximum time for device to trip at specified current ratings at 20°C unless otherwise specified.

Environmental Characteristics

Test	Test Conditions	Resistance Change
Passive Aging	+85°C, 1000 hours	+5% typical resistance change
Humidity Aging	+85°C, 85% R.H., 7 days	+5% typical resistance change
Thermal Shock	+85°C to -40°C, 10 times MIL-STD-202, Method 107G	+5% typical resistance change
Vibration	MIL-STD-883C, Condition A	No change
Solvent resistance	MIL-STD-202, Method 215	No change

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Dimensions

	A	B	C	D	E	
Part No	Max.	Max.	Max.	Min.	Max.	Max.
UBF RU30090	7.4	12.7	4.3	5.8	7.6	3.0
UBF RU30110	7.4	12.7	4.3	5.8	7.6	3.0
UBF RU30135	7.4	11.7	4.3	5.8	7.6	3.0
UBF RU30160	7.4	12.7	4.3	5.8	7.6	3.0
UBF RU30185	7.4	12.7	4.3	5.8	7.6	3.0
UBF RU30250	7.6	13.5	4.3	5.8	7.6	3.0
UBF RU30300	7.9	13.7	4.3	5.8	7.6	3.0
UBF RU30400	9.4	14.5	4.3	5.8	7.6	3.0
UBF RU30500	10.2	15.2	4.3	5.8	7.6	3.0
UBF RU30600	11.2	15.8	4.3	5.8	7.6	3.0
UBF RU30700	12.8	17.5	4.3	5.8	7.6	3.0
UBF RU30800	14.5	19.1	4.3	5.8	7.6	3.0
UBF RU30900	16.3	20.8	4.3	5.8	7.6	3.0

NOTE: All drawings are not in scale and layout may vary.

All parts dimension is in millimeter unless otherwise specified.

Radial-leaded parts are not designed for reflow soldering.

Lead Materials: UBF RX30090 – 250, Tin plated Copper Steel, $\square 0.51\text{mm} / 0.205\text{mm}^2$
 24 AWG UBF RX30300 – 900, Tin plated Copper, $\square 0.81\text{mm} / 0.52\text{mm}^2$
 20 AWG

Insulation Materials: Cured, flame-retardant epoxy polymer that meets UL94V-0

Agency Approval: UL File Number E 119550
 c-UL File Number E 119550
 TUV File Number Pending

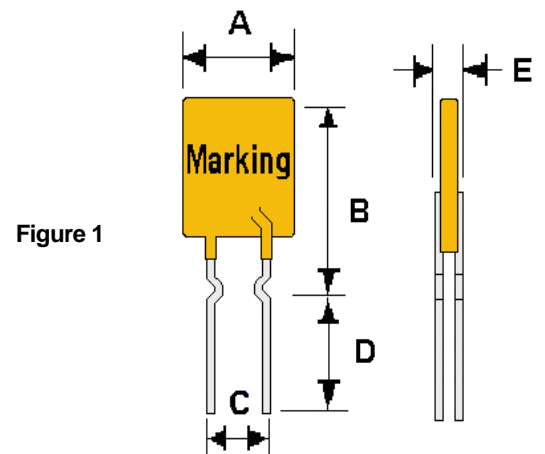


Figure 1

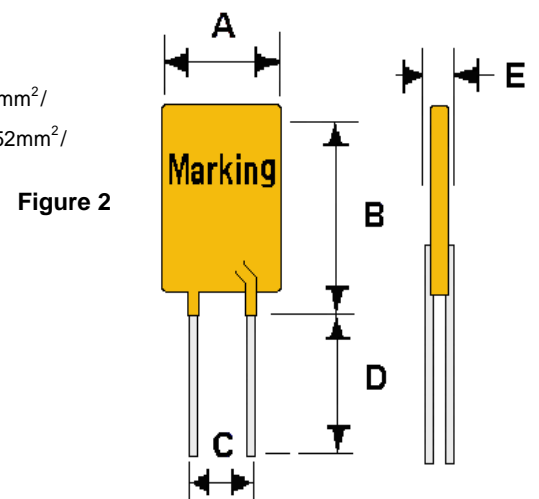
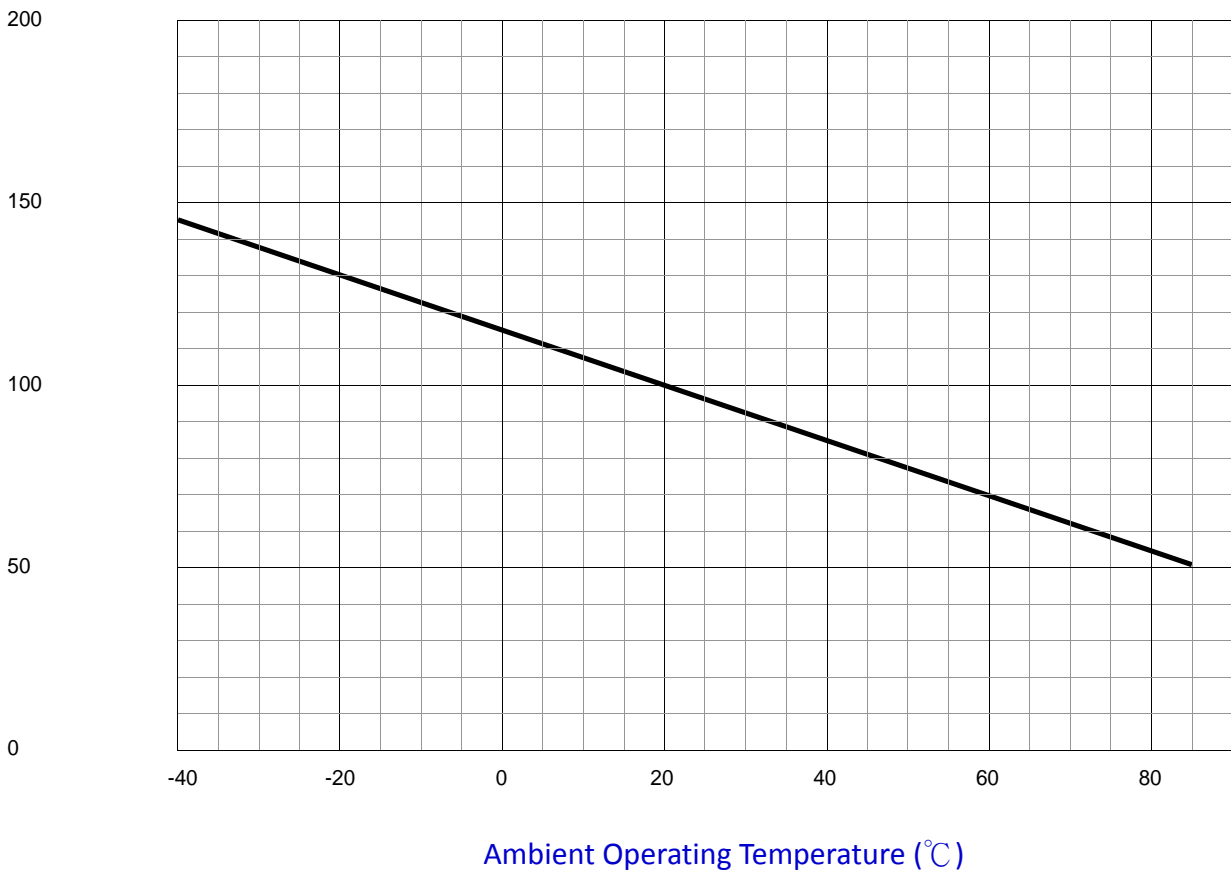


Figure 2

UBF RU30 Series (30V)

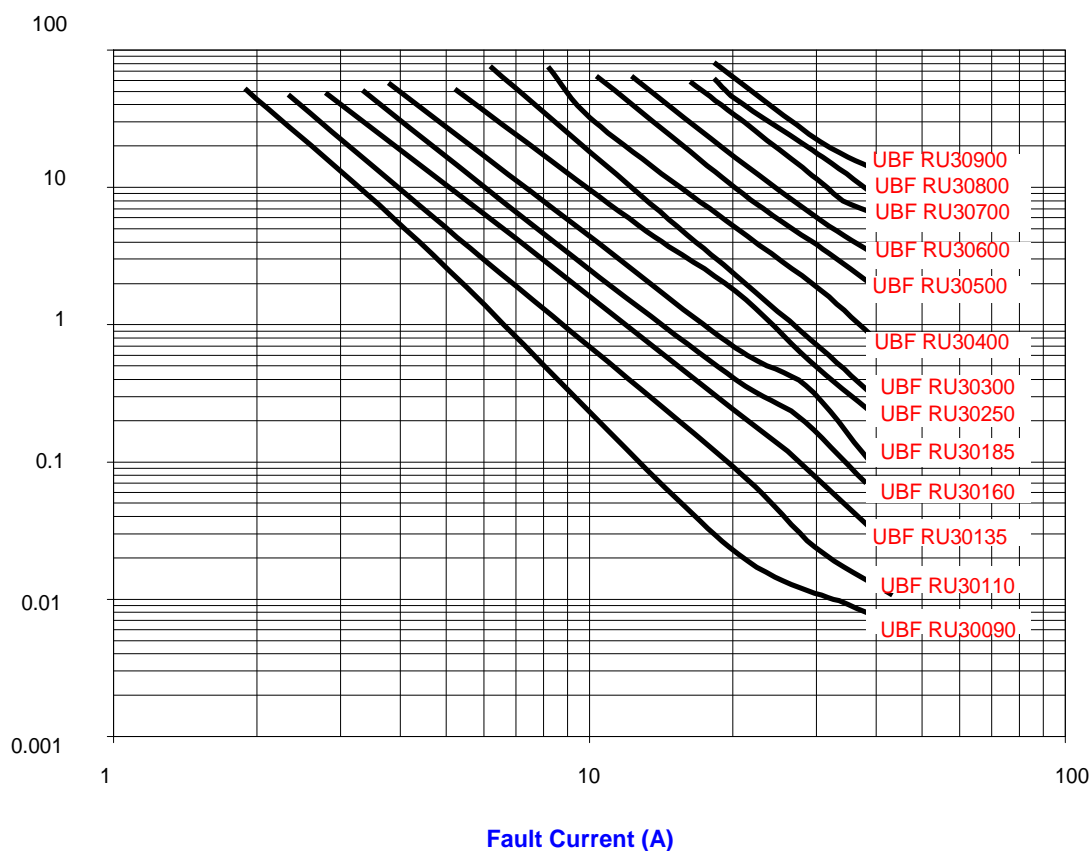
Typical Thermal Derating Chart – I_{hold} (A)

Part No	-40	-20	0	20	40	60	85
UBF RU30090	1.32	1.17	1.04	0.90	0.75	0.61	0.47
UBF RU30110	1.62	1.43	1.27	1.10	0.91	0.75	0.57
UBF RU30135	1.98	1.76	1.55	1.35	1.12	0.92	0.70
UBF RU30160	2.35	2.08	1.84	1.60	1.33	1.09	0.83
UBF RU30185	2.72	2.41	2.13	1.85	1.54	1.26	0.96
UBF RU30250	3.68	3.25	2.88	2.50	2.08	1.70	1.30
UBF RU30300	4.41	3.90	3.45	3.00	2.49	2.04	1.56
UBF RU30400	5.80	5.20	4.60	4.00	3.32	2.72	2.08
UBF RU30500	7.35	6.50	5.75	5.00	4.15	3.40	2.60
UBF RU30600	8.82	7.80	6.90	6.00	4.98	4.08	3.12
UBF RU30700	10.25	9.10	8.05	7.00	5.81	4.76	3.64
UBF RU30800	11.76	10.40	9.20	8.00	6.64	5.44	4.16
UBF RU30900	13.23	11.70	10.35	9.00	7.47	6.12	4.68

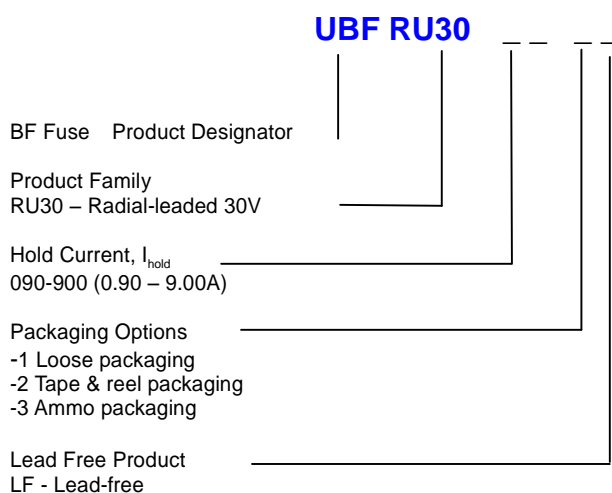


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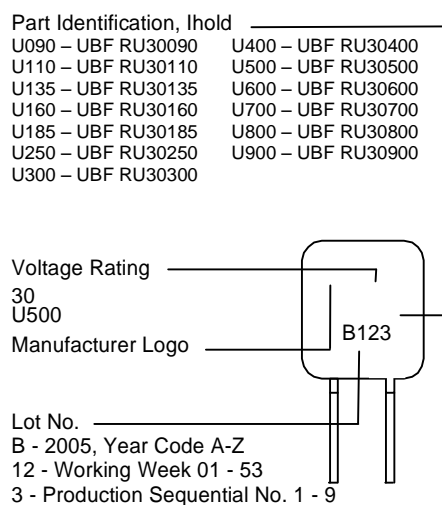
Typical Time To Trip Curve at 20°C



Ordering Information



Part Marking



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Packaging Information

Part No	-1 Loose Pack Quantity	-2 Tape & Reel Quantity	-3 Ammo Pack Quantity
UBF RU0010	500	2000	2000
UBF RU0015	500	2000	2000
UBF RU0020	500	2000	2000
UBF RU0025	500	2000	2000
UBF RU0050	500	2000	2000
UBF RU0060	500	2500	2000
UBF RU0070	500	1500	1000
UBF RU0080	500	1500	1000
UBF RU0090	250	1500	1000
UBF RU0070	250	1500	1000
UBF RU0090	250	Not available	Not available
UBF RU0090	250	Not available	Not available