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, Ø0.51, Sn/CuFe	0.90	1.8	30	40	0.6	4.5	5.9	0.070	0.22
UBF RU30110	Fig. 1, Ø0.51, Sn/CuFe	1.10	2.2	30	40	0.7	5.5	6.6	0.050	0.17
U BF RU30135	Fig. 1, Ø0.51, Sn/CuFe	1.35	2.7	30	40	0.8	6.75	7.3	0.040	0.13
UBF RU30160	Fig. 1, Ø0.51, Sn/CuFe	1.60	3.2	30	40	0.9	8.5	8.0	0.030	0.11
U BF RU30185	Fig. 1, Ø0.51, Sn/CuFe	1.85	3.7	30	40	1.0	9.25	8.7	0.030	0.09
UBF RU30250	Fig. 1, Ø0.51, Sn/CuFe	2.50	5.0	30	40	1.2	12.5	10.3	0.020	0.07
UBF RU30300	Fig. 2, Ø0.81, Sn/Cu	3.0	6.0	30	40	2.0	15.0	10.8	0.020	0.08
UBF RU30400	Fig. 2, Ø0.81, Sn/Cu	4.0	8.0	30	40	2.5	20.0	12.7	0.010	0.05
UBF RU30500	Fig. 2, Ø0.81, Sn/Cu	5.0	10.0	30	40	3.0	25.0	14.5	0.010	0.05
U BF RU30600	Fig. 2, Ø0.81, Sn/Cu	6.0	12.0	30	40	3.5	30.0	16.0	0.005	0.04
UBF RU30700	Fig. 2, Ø0.81, Sn/Cu	7.0	14.0	30	40	3.8	35.0	17.5	0.005	0.03
UBF RU30800	Fig. 2, Ø0.81, Sn/Cu	8.0	16.0	30	40	4.0	40.0	18.8	0.005	0.02
UBF RU30900	Fig. 2, Ø0.81, 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

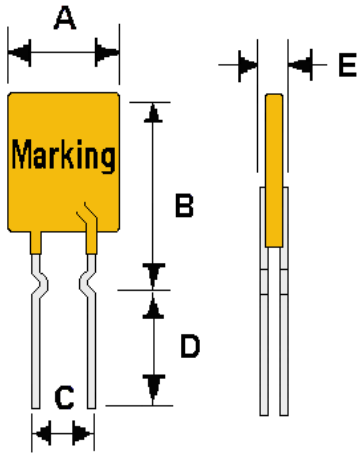
Test	Test Conditions	Resistance Change
Passive Aging	+85°C, 1000 hours	±5% typical resistance change
Humidity Aging	+85°C, 85% R.H., 7 days	±5% typical resistance change
Thermal Shock	+85°C to -40°C, 10 times MIL-STD-202, Method 107G	±5% typical resistance change
Vibration	MIL-STD-883C, Condition A	No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

UBF RU30 Series (30V)

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

Figure 1



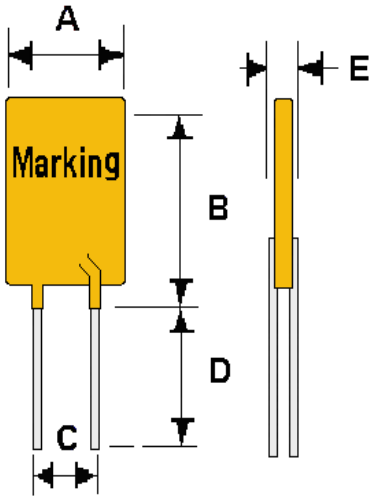
NOTE: All drawings are not in scale and layout may vary.

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, □0.51mm / 0.205mm^2/ 24 AWG UBF RX30300 – 900, Tin plated Copper, □0.81mm / 0.52mm^2/ 20 AWG

Figure 2



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

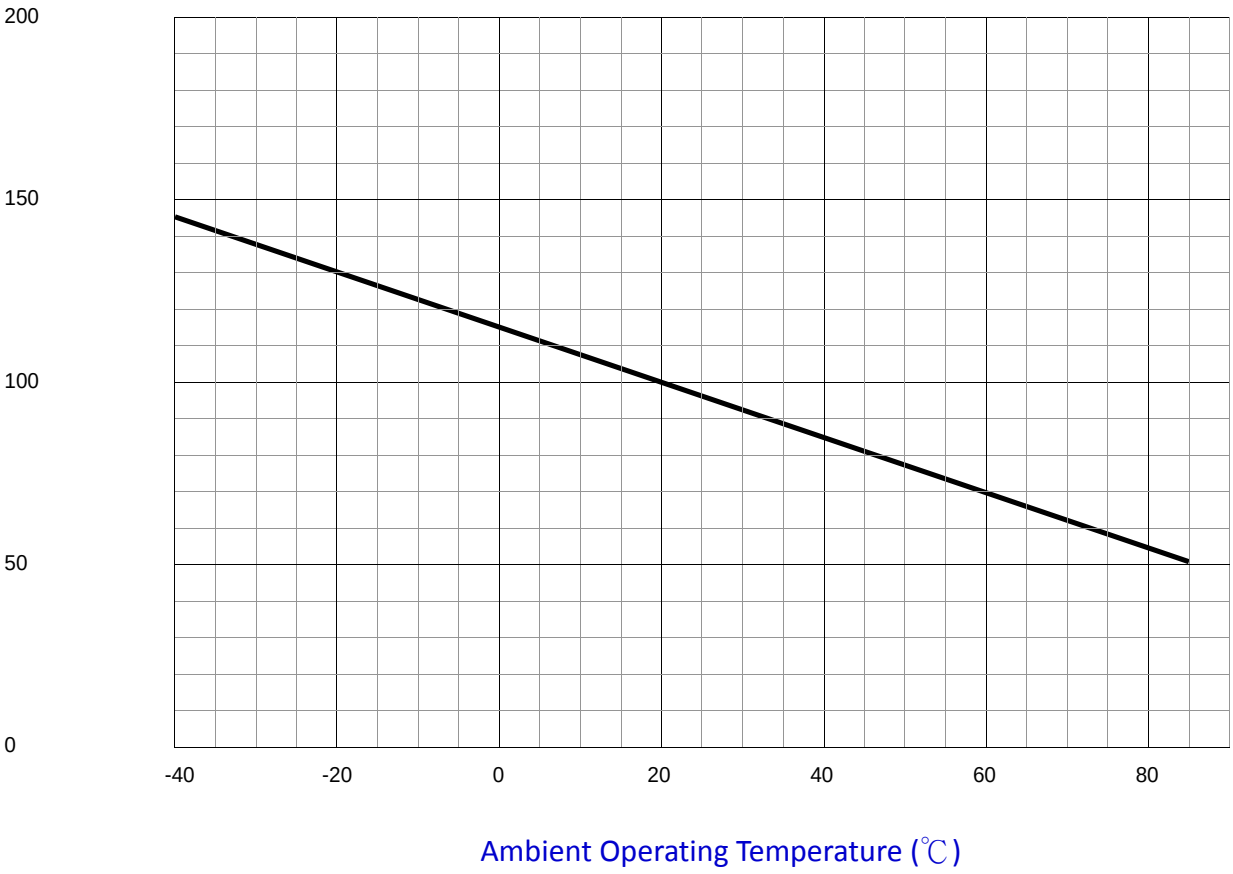
Agency Approval:

UL File Number	E 119550
c-UL File Number	E 119550
TUV File Number	Pending

UBF RU30 Series (30V)

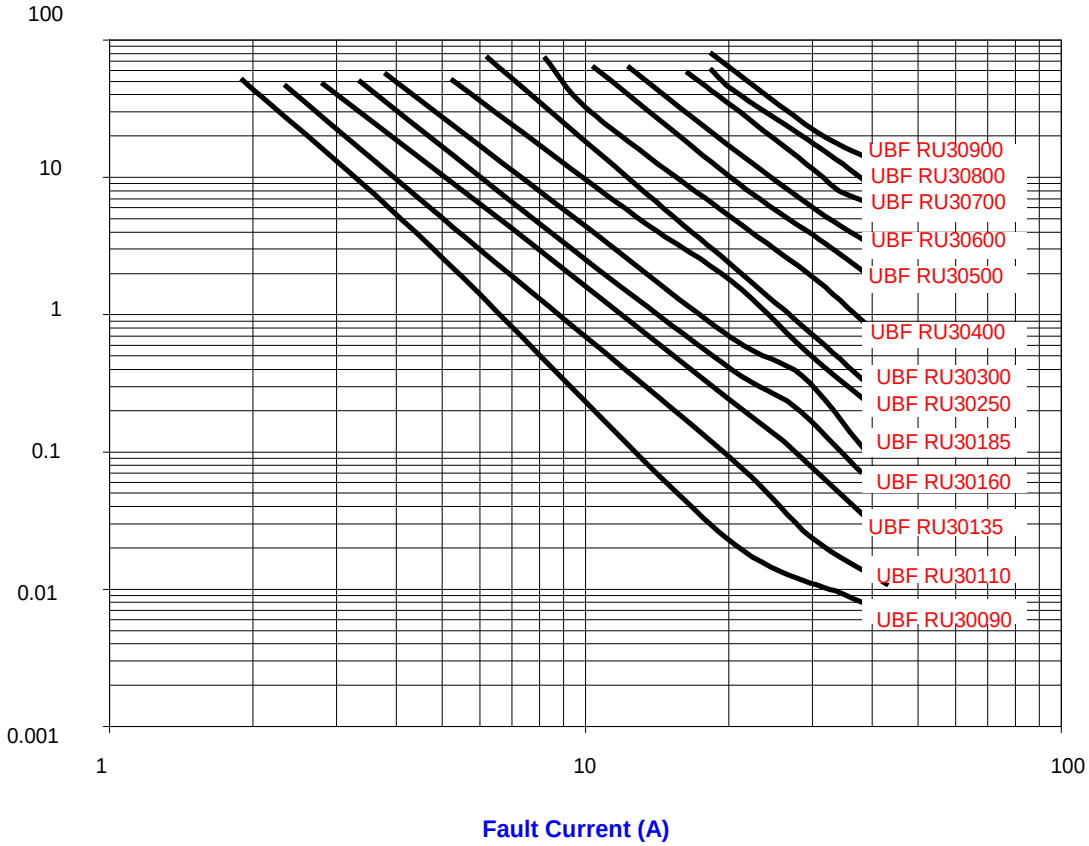
Typical Thermal Derating Chart – I_{hold} (A)

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



UBF RU30 Series (30V)

Typical Time To Trip Curve at 20°C



Ordering Information

UBF RU30 _ _ _ _ _

BF Fuse Product Designator

Product Family
RU30 – Radial-leaded 30V

Hold Current, I_{hold}
090-900 (0.90 – 9.00A)

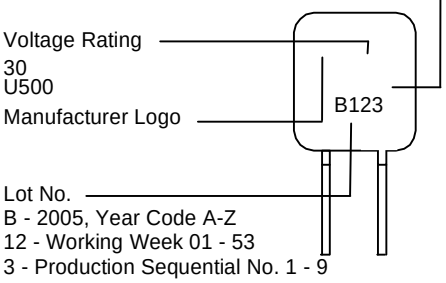
Packaging Options
-1 Loose packaging
-2 Tape & reel packaging
-3 Ammo packaging

Lead Free Product
LF - Lead-free

Part Marking

Part Identification, Ihold

U090 – UBF RU30090	U400 – UBF RU30400
U110 – UBF RU30110	U500 – UBF RU30500
U135 – UBF RU30135	U600 – UBF RU30600
U160 – UBF RU30160	U700 – UBF RU30700
U185 – UBF RU30185	U800 – UBF RU30800
U250 – UBF RU30250	U900 – UBF RU30900
U300 – UBF RU30300	



Lot No.
B - 2005, Year Code A-Z
12 - Working Week 01 - 53
3 - Production Sequential No. 1 - 9

UBF RU30 Series (30V)

Packaging Information

Part No	-1 Loose Pack Quantity	-2 Tape & Reel Quantity	-3 Ammo Pack Quantity
UBF RU30110	500	2000	2000
UBF RU30105	500	2000	2000
UBF RU30160	500	2000	2000
BFRU30185	500	2000	2000
UBF RU30250	500	2000	2000
UBF RU30300	500	2500	1000
UBF RU30400	500	1500	1000
UBF RU30500	250	1500	1000
UBF RU30600	250	1500	1000
UBF RU30700	250	1500	1000
UBF RU30800	250	Not available	Not available
UBF RU30900	250	Not available	Not available