

# UBF RX60 Series (60V)

## Electrical Characteristics

Part No Figure / Lead Option	$I_{hold}$ (A)	$I_{trip}$ (A)	$V_{max}$ (V)	$I_{max}$ (A)	$P_d$ type (W)	Max. (A)	Time-to-trip (s)	$R_{min}$ ( $\Omega$ )	$R_{1max}$ ( $\Omega$ )
UBF RX60005 Fig. 1, $\emptyset$ 0.51, Sn/CuFe	0.05	0.10	60	40	0.26	0.50	5.0	7.30	7.50
UBF RX60010 Fig. 1, $\emptyset$ 0.51, Sn/CuFe	0.10	0.20	60	40	0.38	0.50	4.0	2.50	7.50
UBF RX60017 Fig. 1, $\emptyset$ 0.51, Sn/CuFe	0.17	0.34	60	40	0.48	0.85	3.0	3.30	8.00
UBF RX60020 Fig. 1, $\emptyset$ 0.51, Sn/CuFe	0.20	0.40	60	40	0.41	1.00	2.2	1.83	4.40
UBF RX60025 Fig. 1, $\emptyset$ 0.51, Sn/CuFe	0.25	0.50	60	40	0.45	1.25	2.5	1.25	3.00
UBF RX60030 Fig. 1, $\emptyset$ 0.51, Sn/CuFe	0.30	0.60	60	40	0.49	1.50	3.0	0.88	2.10
UBF RX60040 Fig. 1, $\emptyset$ 0.51, Sn/CuFe	0.40	0.80	60	40	0.56	2.00	3.8	0.55	1.29
UBF RX60050 Fig. 1, $\emptyset$ 0.51, Sn/Cu	0.50	1.00	60	40	0.77	2.50	4.0	0.50	1.17
UBF RX60065 Fig. 1, $\emptyset$ 0.51, Sn/Cu	0.65	1.30	60	40	0.88	3.25	5.3	0.31	0.72
UBF RX60075 Fig. 1, $\emptyset$ 0.51, Sn/Cu	0.75	1.50	60	40	0.92	3.75	6.3	0.25	0.60
UBF RX60090 Fig. 1, $\emptyset$ 0.51, Sn/Cu	0.90	1.80	60	40	0.99	4.50	7.2	0.20	0.47
UBF RX60110 Fig. 2, $\emptyset$ 0.81, Sn/Cu	1.10	2.20	60	40	1.50	5.50	8.2	0.15	0.38
UBF RX60135 Fig. 2, $\emptyset$ 0.81, Sn/Cu	1.35	2.70	60	40	1.70	6.75	9.6	0.12	0.30
UBF RX60160 Fig. 2, $\emptyset$ 0.81, Sn/Cu	1.60	3.20	60	40	1.90	8.00	11.4	0.09	0.22
UBF RX60185 Fig. 2, $\emptyset$ 0.81, Sn/Cu	1.85	3.70	60	40	2.10	9.25	12.6	0.08	0.19
UBF RX60250 Fig. 2, $\emptyset$ 0.81, Sn/Cu	2.50	5.00	60	40	2.50	12.50	15.6	0.05	0.13
UBF RX60300 Fig. 2, $\emptyset$ 0.81, Sn/Cu	3.00	6.00	60	40	2.80	15.00	19.8	0.04	0.10
UBF RX60375 Fig. 2, $\emptyset$ 0.81, Sn/Cu	3.75	7.50	60	40	3.20	18.75	24.0	0.03	0.08

$I_{hold}$ : 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	±5% typical resistance change
MIL-STD-202, Method 107G		
Vibration	MIL-STD-883C, Condition A	No change
Solvent resistance	MIL-STD-202, Method 215	No change

# UBF RX60 Series (60V)

## Dimensions

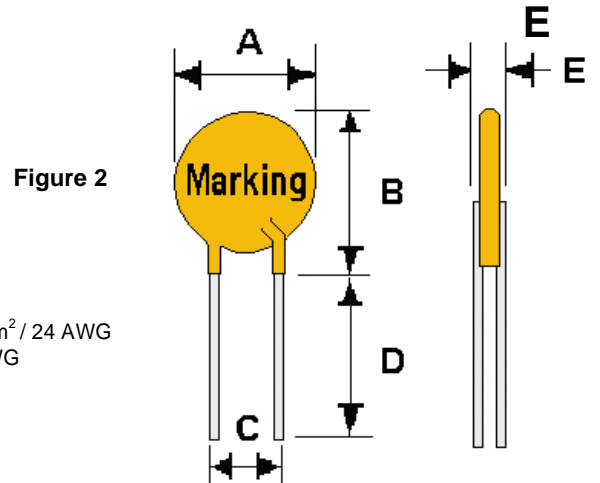
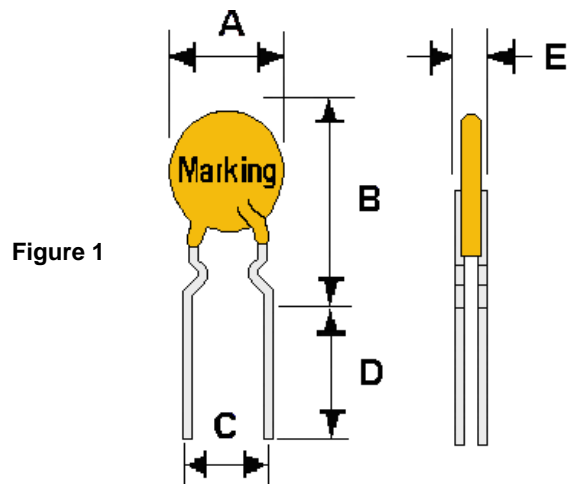
Part No	A	B	C	D	E	
	Max.	Max.	Max.	Min.	Max.	
UBF RX60005	7.4	12.7	4.3	5.8	7.6	3.0
UBF RX60010	7.4	12.7	4.3	5.8	7.6	3.0
UBF RX60017	7.4	12.7	4.3	5.8	7.6	3.0
UBF RX60020	7.4	11.7	4.3	5.8	7.6	3.0
UBF RX60025	7.4	12.7	4.3	5.8	7.6	3.0
UBF RX60030	7.4	12.7	4.3	5.8	7.6	3.0
UBF RX60040	7.6	13.5	4.3	5.8	7.6	3.0
UBF RX60050	7.9	13.7	4.3	5.8	7.6	3.0
UBF RX60065	9.4	14.5	4.3	5.8	7.6	3.0
UBF RX60075	10.2	15.2	4.3	5.8	7.6	3.0
UBF RX60090	11.2	15.8	4.3	5.8	7.6	3.0
UBF RX60110	12.8	17.5	4.3	5.8	7.6	3.0
UBF RX60135	14.5	19.1	4.3	5.8	7.6	3.0
UBF RX60160	16.3	20.8	4.3	5.8	7.6	3.0
UBF RX60185	17.5	22.4	4.3	5.8	7.6	3.0
UBF RX60250	20.8	25.4	9.4	10.9	7.6	3.0
UBF RX60300	23.9	28.6	9.4	10.9	7.6	3.0
BFRX60375	27.2	31.8	9.4	10.9	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:** UBFRX60010 – 040, Tin plated Copper Steel, 0.51mm / 0.205mm<sup>2</sup> / 24 AWG  
 UBFRX60050 – 090, Tin plated Copper, 0.51mm / 0.205mm<sup>2</sup> / 24 AWG  
 UBFRX60110 – 375, Tin plated Copper, 0.81mm / 0.52mm<sup>2</sup> / 20 AWG

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

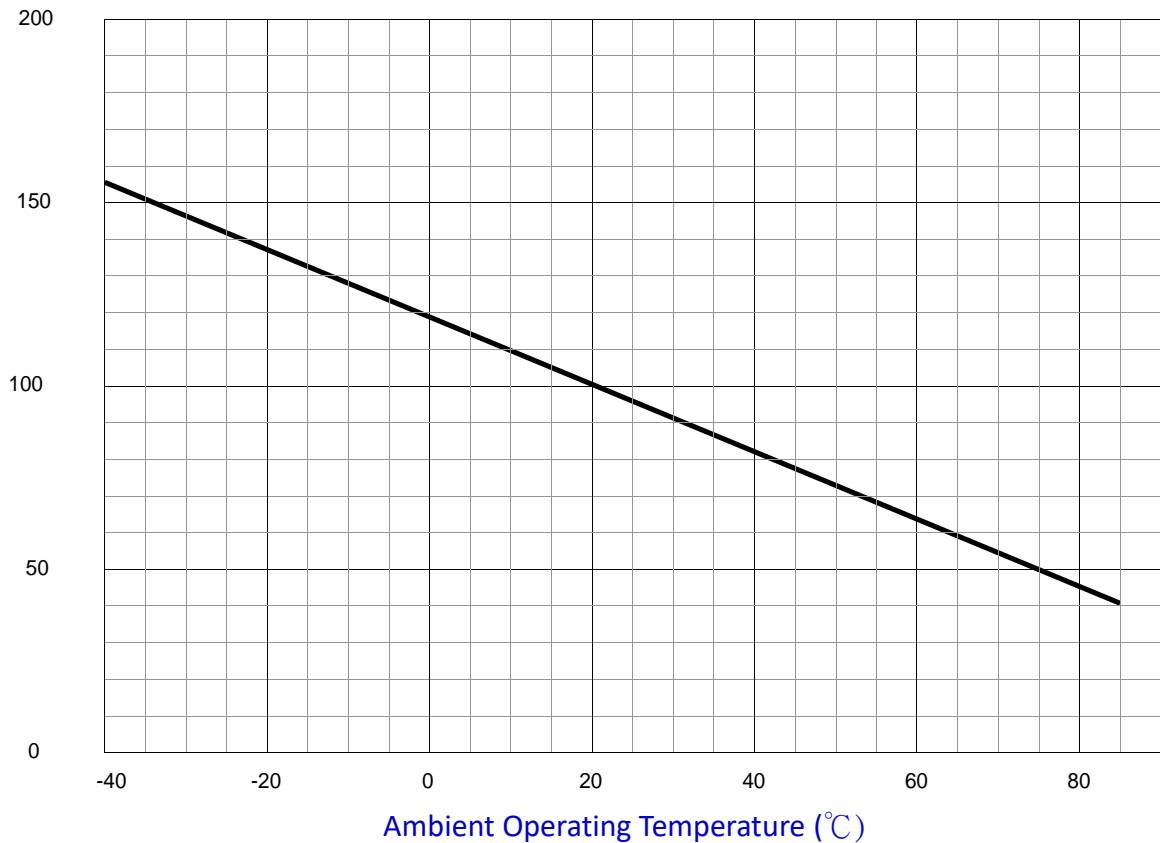
**Agency Approval:** UL File Number E 119550  
 c-UL File Number E 119550  
 TUV File Number Pending



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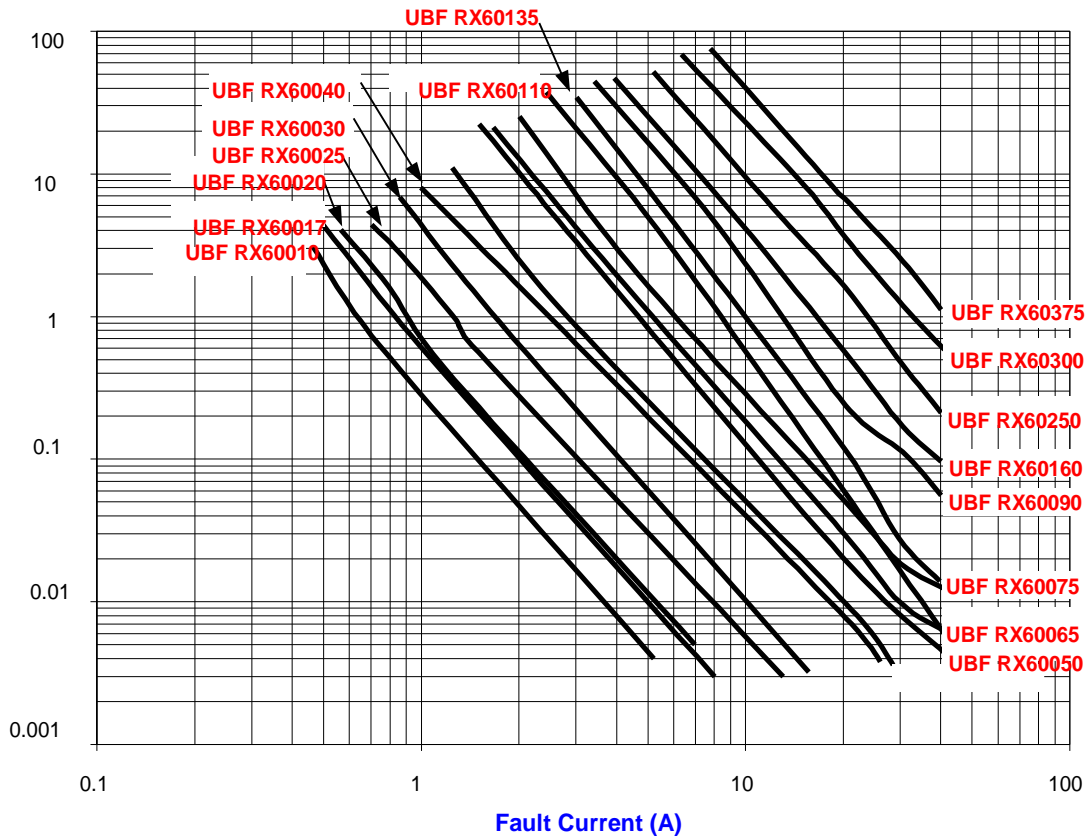
**Typical Thermal Derating Chart –  $I_{hold}$  (A)**

Part No	-40	-20	0	20	40	60	85
UBF RX60010	0.16	0.14	0.11	0.10	0.08	0.067	0.04
UBF RX60017	0.26	0.23	0.21	0.17	0.14	0.11	0.07
UBF RX60020	0.31	0.27	0.24	0.20	0.16	0.13	0.08
UBF RX60025	0.39	0.34	0.30	0.25	0.20	0.16	0.10
UBF RX60030	0.47	0.41	0.36	0.30	0.24	0.20	0.12
UBF RX60040	0.62	0.54	0.48	0.40	0.32	0.25	0.16
UBF RX60050	0.78	0.68	0.60	0.50	0.41	0.32	0.20
UBF RX60065	1.01	0.88	0.77	0.65	0.53	0.41	0.26
UBF RX60075	1.16	1.02	0.89	0.75	0.61	0.47	0.30
UBF RX60090	1.40	1.22	1.07	0.90	0.73	0.57	0.36
UBF RX60110	1.71	1.50	1.31	1.10	0.89	0.69	0.44
UBF RX60135	2.09	1.84	1.61	1.35	1.09	0.85	0.54
UBF RX60160	2.48	2.18	1.90	1.60	1.30	1.01	0.64
UBF RX60185	2.87	2.52	2.20	1.85	1.50	1.17	0.74
UBF RX60250	3.88	3.40	2.98	2.50	2.03	1.58	1.00
UBF RX60300	4.65	4.08	3.57	3.00	2.43	1.89	1.20
UBF RX60375	5.81	5.10	4.46	3.75	3.04	2.36	1.50

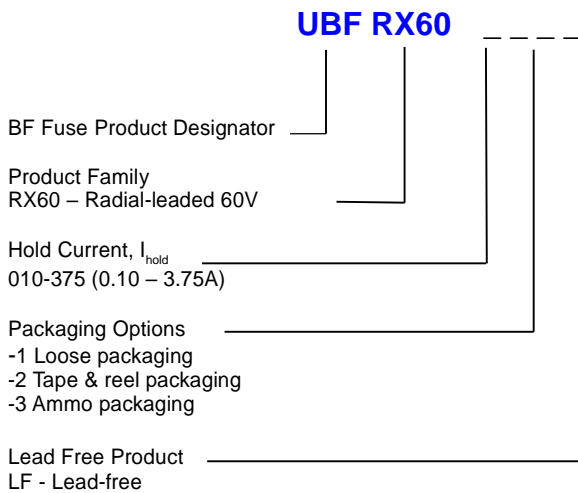


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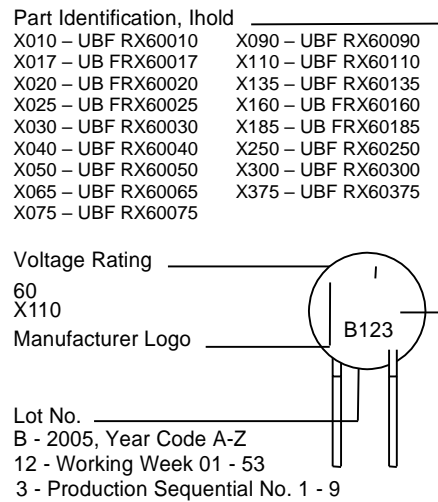
## Typical Time To Trip Curve at 20°C



## 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 RX60010	500	3000	2000
UBF RX60017	500	3000	2000
UBF RX60020	500	3000	2000
UBF RX60025	500	3000	2000
UBF RX60030	500	3000	2000
UBF RX60040	500	3000	2000
UBF RX60050	500	3000	2000
UBF RX60065	500	3000	2000
UBF RX60075	500	3000	2000
UBF RX60090	500	3000	2000
UBF RX60110	500	1500	1000
UBF RX60135	500	1500	1000
UBF RX60160	500	1500	1000
UBF RX60185	500	1500	1000
UBF RX60250	250	1000	1000
UBF RX60300	250	1000	1000
UBF RX60375	250	Not available	Not available