UBF VT Series - 90°C Activation

Electrical Characteristics

Part No	Figure	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_{max} (Ω)	R_{1max} (Ω)
UBF VT110	1	1.1	2.7	16	100	0.7	7.00	5.0	0.038	0.070	0.140
UBF VT170	1	1.7	3.4	16	100	1.0	8.50	3.0	0.030	0.052	0.105
UBF VT170S	2	1.7	3.4	16	100	1.0	8.50	3.0	0.030	0.052	0.105
UBF VT175	1	1.75	3.6	16	100	0.8	8.75	5.0	0.029	0.051	0.102
UBF VT175N	1	1.75	3.5	12	100	1.0	8.50	3.0	0.029	0.051	0.105
UBF VT200	1	2.0	4.7	16	100	0.9	10.0	5.0	0.022	0.039	0.078
UBF VT210	1	2.1	4.7	16	100	1.2	10.0	5.0	0.018	0.030	0.060
UBF VT210S	2	2.1	4.7	16	100	1.2	10.0	5.0	0.018	0.030	0.060
UBF VT210SS	3	2.1	4.7	16	100	1.2	10.0	5.0	0.018	0.030	0.060
UBF VT210N	1	2.1	4.7	12	100	1.2	10.0	5.0	0.018	0.030	0.060
UBF VT240	1	2.4	5.9	16	100	1.0	12.0	5.0	0.014	0.026	0.052

I_{hold}: Hold current is the maximum current that **UB 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	+60°C, 1000 hours	±10% typical resistance change
Humidity Aging	+85°C, 85% R.H., 7 days	±10% 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

UBF VT Series - 90°C Activation

Dimensions

Part No	A		B		C		D		E		I_F	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
UBF VT110	23.6	25.6	--	0.7	2.7	2.9	7.0	8.0	7.0	8.0	2.3	2.5
UBF VT170	15.4	17.5	0.5	0.8	7.0	7.4	4.0	6.2	4.0	6.2	3.9	4.1
UBF VT170S	15.4	17.5	0.5	0.8	7.0	7.4	4.0	6.2	4.0	6.2	3.9	4.1
UBF VT175	21.2	23.2	--	0.8	3.5	3.9	4.6	6.6	4.6	6.6	2.9	3.1
UBF VT175N	26.0	28.0	0.5	0.8	3.55	3.80	6.5	8.0	6.5	8.0	2.4	2.6
UBF VT200	20.9	23.1	--	0.8	4.1	4.5	3.0	4.8	3.0	4.8	2.9	3.1
UBF VT210	20.9	23.1	0.6	0.8	4.9	5.3	4.1	5.8	4.1	5.8	3.9	4.1
UBF VT210S	20.9	23.1	0.6	0.8	4.9	5.3	4.1	5.8	4.1	5.8	3.9	4.1
UBF VT210SS	20.9	23.1	0.6	0.8	4.9	5.3	4.1	5.8	4.1	5.8	3.9	4.1
UBF VT210N	30.0	32.0	0.6	0.8	3.55	3.80	5.5	7.5	5.5	7.5	2.4	2.6
UBF VT240	23.8	26.2	--	0.8	4.9	5.3	3.5	5.7	3.5	5.7	3.9	4.1

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

All parts dimension is in millimeter unless otherwise specified.

Terminal material is quarter hard Nickel with nominal thickness 0.125mm.

Tape material is Polyester.

All terminal's slit dimension is 0.5x4.0mm.

Rounded corner terminals are available upon customer request.

All part numbers are available without wrapping upon customer request.

Packaging: 1000 pcs per bag (UBVT110 to UBVT240)

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

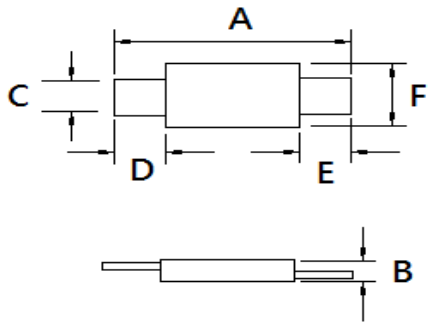


Figure 1

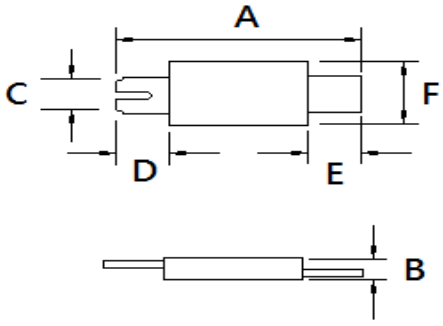
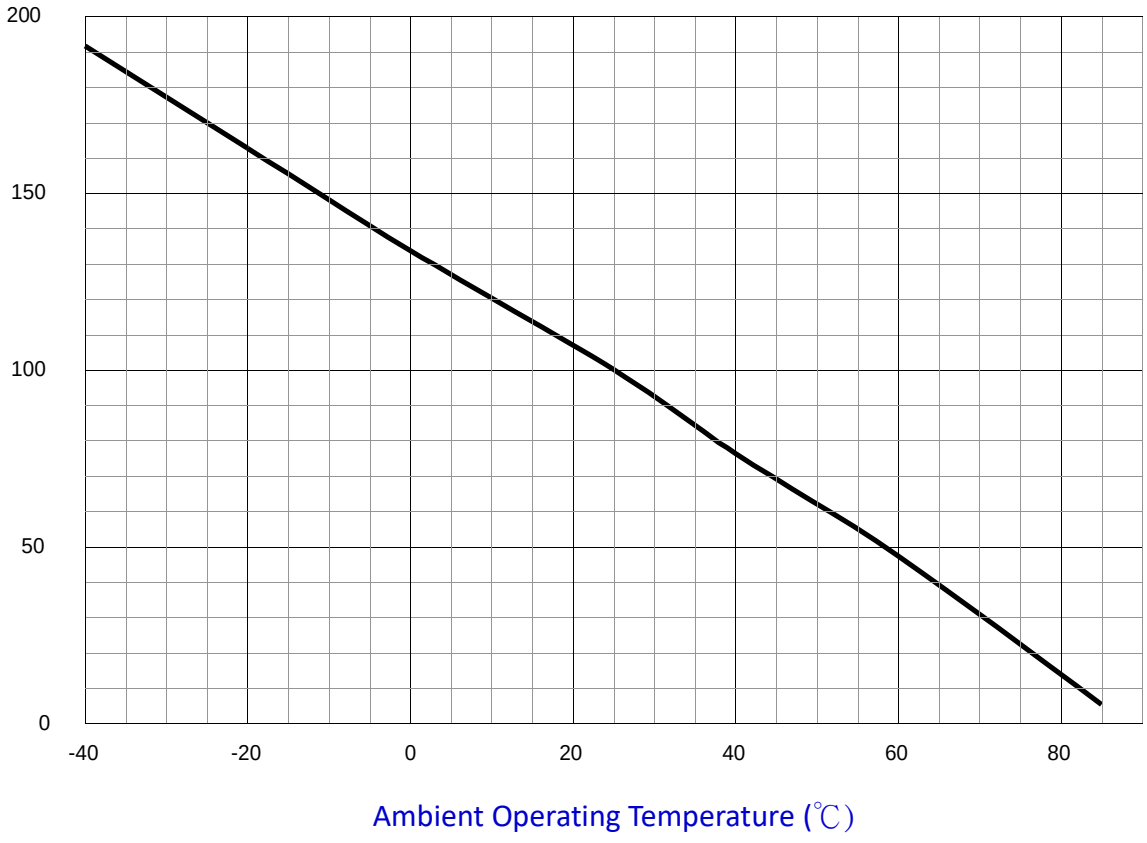


Figure 2

UBF VT Series - 90°C Activation

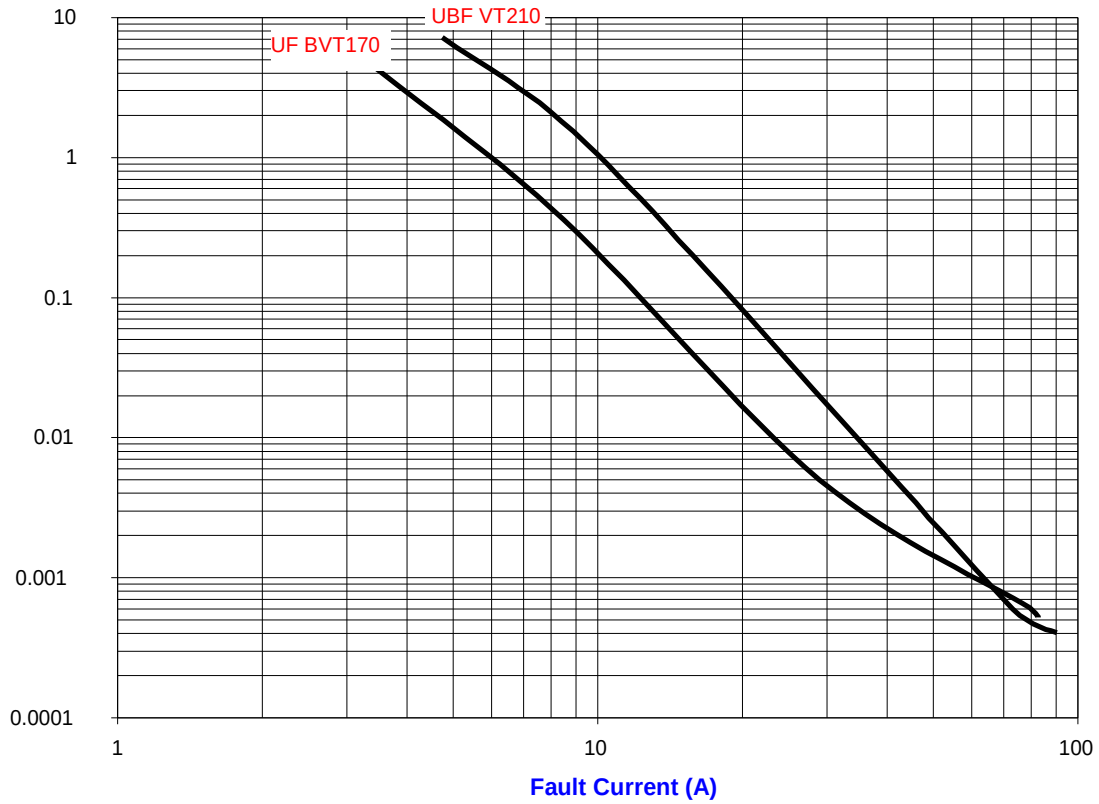
Typical Thermal Derating Chart – I_{hold} (A)

Part No	-40	-20	0	25	40	60	85
UBF VT110	2.0	1.7	1.4	1.1	0.8	0.5	0.1
UBF VT170	3.2	2.7	2.2	1.7	1.3	0.8	0.1
UBF VT170S	3.2	2.7	2.2	1.7	1.3	0.8	0.1
UBF VT175	3.2	2.7	2.2	1.75	1.3	0.8	0.1
UBF VT175N	3.2	2.7	2.2	1.75	1.3	0.8	0.1
UBF VT200	3.7	3.2	2.6	2.0	1.5	0.9	0.1
UBF VT210	4.1	3.5	2.9	2.1	1.6	1.0	0.1
UBF VT210S	4.1	3.5	2.9	2.1	1.6	1.0	0.1
UBF VT210SS	4.1	3.5	2.9	2.1	1.6	1.0	0.1
UBF VT210N	4.1	3.5	2.9	2.1	1.6	1.0	0.1
UBF VT240	4.4	3.7	3.1	2.4	1.8	1.2	0.1



UBF VT Series - 90°C Activation

Typical Time To Trip Curve at 20 °C



Ordering Information

UBF VT 170 _ _ _

UB Fuse Product Designator

Product Family
VT - Very Low Temp.,
90°C activation

Hold Current, I_{hold}
070-340 (0.70 - 3.40A)

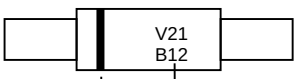
Lead Option & Type
G - Right angled terminal
L - Longer terminal
N - Narrow strap type
S - Single slit terminal
SS - Double slits terminal
U - Unwrapped strap type
X - Special terminal

Lead-Free Product
LF - Lead-free

Part Marking

Part Identification, I hold
V11 – UBF VT110
V17 – UBF VT170, 170S
V175 – UBF VT175
V175N – UBF VT175N
V20 - UBF VT200
V21 - UBF VT210, 210S, 210SS
V21N – UBF VT210N
V24 – UBF VT240

Manufacturer Logo



Orientation Mark (Optional)

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