

Positive Thermol Coefficient VBC250 Series

Application:

■Line Voltage Power Supply, Transformer and Appliances

Product Features:

- Low hold current, Solid state Radial-leaded product ideal for up to 250V AC/DC
- Radial leaded devices
- High-voltage surge capabilities
- Flame retardant epoxy polymer insulating material UL94 V-0
- Available in lead-free versions
- Temperature Range -40°C to 85°C

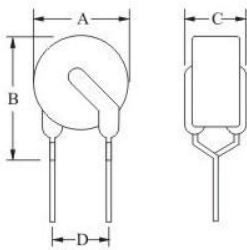
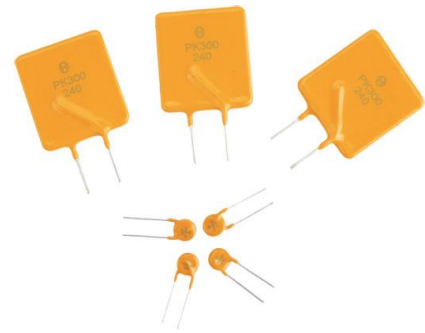


Fig 1

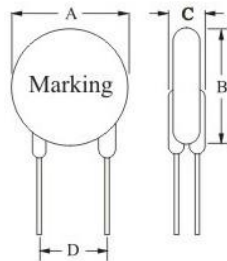


Fig 2

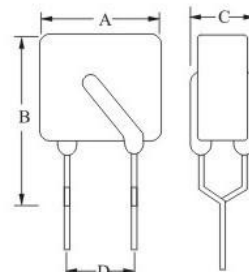


Fig 3

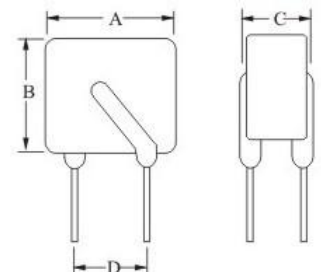


Fig 5

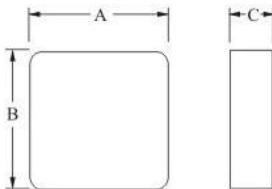


Fig 4

TEST METHODS AND RESULTS

Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, V_{max} , 25°C	$T \leq \text{max. Time to trip } (T_{trip})$
Hold Current	60 min, at I_H	No trip
Trip Cycle Life	V_{max} , I_{max} , 100 cycles	No arcing or burning
Trip Endurance	V_{max} , 24hours	No arcing or burning

RATING AND CHARACTERISTICS

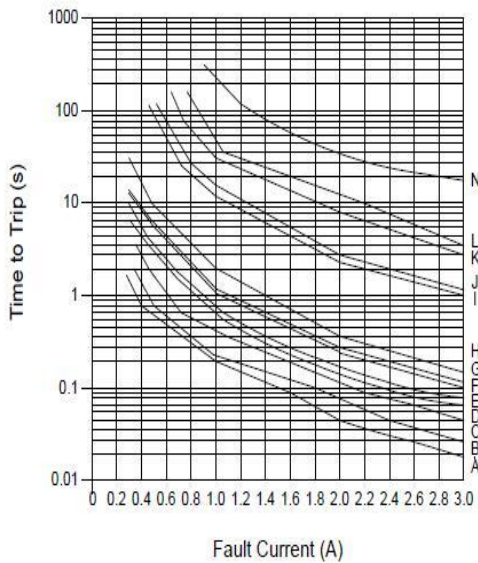
Part No.	V _{rms}	I _H	R _{min}	R _{max}	I _T	I _{max}	Trip Time /I	Pd	Size(mm)						Fig.
	(V)	(mA)	(Ω)	(Ω)	(A)	(A)	(S/A)	(W)	A	B	C	D	E	F	No.
VBC250-030	250	30	28.00	75.00	0.09	1.0	15.0/0.15	1.0	6.0	8.0	5.1	4.6	0.6	7.6	2
VBC250-040	250	40	14.00	41.00	0.15	1.0	15.0/0.25	1.0	7.4	13.5/12.7	5.1	4.6	0.6	4.6/7.6	1/2
VBC250-060	250	60	8.50	25.00	0.21	1.0	15.0/0.35	1.0	7.4	14.5/12.7	5.1	4.6	0.6	4.6/7.6	1/2
VBC250-080	250	80	6.20	15.00	0.20	3.0	15.4/0.50	1.0	7.4	14.5/12.7	5.1	4.6	0.6	4.6/7.6	1/2
VBC250-090	250	90	2.80	11.20	0.24	3.0	15.8/0.60	1.0	7/4	14.5/12.7	5.1	4.6	0.6	4.6/7.6	1/2
VBC250-110	250	110	2.50	10.00	0.30	3.0	15.8/0.75	1.0	7.0	14.5/10.5	5.1	4.6	0.6	4.6/7.6	3/5
VBC250-120	250	120	2.50	9.00	0.36	4.0	15.8/0.80	1.0	7.0	14.5/10.5	5.1	4.6	0.6	4.6/7.6	3/5
VBC250-145	250	145	2.800	5.600	0.40	4.0	16.0/1.00	1.0	7/5	15.0/11.0	5.1	4.6	0.6	4.6/7.6	3/5
VBC250-180	250	180	2.500	5.100	0.50	4.0	16.0/1.25	1.0	10.5	18.5/14.5	5.1	4.6	0.6	4.6/7.6	3/5
VBC250-200	250	200	2.050	4.320	0.60	5.0	16.2/1.50	1.0	10.5	17.0	5.1	4.6	0.6	7.6	3/5
VBC250-400	250	400	1.200	3.500	0.80	5.0	16.5/2.00	1.0	11.2	17.0	5.1	4.6	0.8	7.6	5
VBC250-600	250	600	0.650	2.100	1.00	5.0	16.8/2.50	1.0	16.0	18.0	5.1	4.6	0.8	7.6	5
VBC250-800	250	800	0.550	1.800	1.30	5.0	17.4/3.25	1.0	20.0	22.0	5.1	4.6	0.8	7.6	5

- I_H = Hold current: maximum current device will pass without tripping in 25°C still air
- I_T = Trip current: minimum current at which the device will trip in 25°C still air.
- V_{MAXi} = Maximum interrupt voltage device can withstand without damage at rated current.
- I_{MAX} = Maximum fault current device can withstand without damage at rated voltage.
- R_{MAX} = Maximum resistance of device in initial (un-soldered) state.
- R_{MIN} = Minimum resistance of device in initial (un-soldered) state.
- Pd_{typ.} = Typical power dissipation from device when in the tripped state at 25°C still air.

Typical Time-To-Trip at 25°C Typical Derating Curve

VBC250 Series

VBC250 Series



- A=VBC250-030
- B=VBC250-040
- C=VBC250-060
- D=VBC250-080
- E=VBC250-090
- F=VBC250-110
- G=VBC250-120
- H=VBC250-145
- I=VBC250-180
- J=VBC250-200
- K=VBC250-400
- L=VBC250-600
- N=VBC250-800

