BSTQC-2105M

1/5 Cubic Inch 2PDT Coil Transient Suppression Sealed Electromagnetic Relay

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1. Product Overview

- BSTQC-2105M equipped with coil transient suppression, BSTQC-2105M without coil transient suppression, both have identical external dimensions,but different ordering markings and corporate standards.
- Permanent magnet excitation balance force structure.
- 1/5 Cubic inches.
- Coil transient suppression.
- 2 PDT.
- Load current from 0.1A to 5A.
- Anti vibration and shock.
- Widely use can to transfer signal and lines in Aerospace and aviation fields.
- Adopted military standard:MIL-PRF-83536G.

2. Product Features

No.	Item	Performance
1	Cpmtact type	2Z
2	Dimesion	20.6mm×10.5mm×16.3mm(max)(1 /5Cubic inches)
3	Weigh	≤ 20g
4	Leakage rate	≤ 1×10^{-3}Pa·cm^3/s
5	Internal moisture content	≤ 5000 ppm

3. Load Characteristics

Load type	Contact Voltage					Life
	28Vd.c.	115Va.c. 400Hz Single phase	115Va.c. 50/60Hz Single phase	115/200Va.c. 400Hz Three phase	115/200Va.c. 50/60Hz Three phase	
Resistive load	5	5	-	-	-	10×10^4
Inductive load	3	5	-	-	-	2×10^4
Inductive load	-	-	-	-	-	1×10^4
Motor load	2	-	-	-	-	10×10^4
Lamp load	1	-	-	-	-	10×10^4
Over load	Resistive:28 Vd.c.(0.2s±0.05s)			20A		50 cycles
Limit	Resistive:28 Vd.c.(0.2s±0.05s)			25A		50 cycles

4. Environment Characteristics

No.	Item		Performance	
1	Environment grade		I	II
2	Temperature range(°C)		-65~+125	
3	Humidity		40°C±2~90%~95%	
4	Low atmospheric range(kPa)		4.39	
5	Shock	Acceleration(m/s^2)	980	1960
		Pulse lasting time(ms)	6	6
6	Sin-Vibration	Frequency range(Hz)	10~2000	10~3000
		Acceleration root-mean-square values (m/s^2)	196	294
7	Random Vibration	Acceleration spectral density ($(m/s^2)^2/Hz$)	30	40
		Acceleration root-mean-square values (m/s^2)	207.1	239.1
8	Acceleration(m/s^2)		294	

5. Product Specifcations

No.	Item		Performance
1	Coil consumption(W)		≤ 2
2	Contact resistance(Ω)	Initial Value	≤ 0.01
		After life	≤ 0.15
3	Operating time(ms)		≤ 6
4	Releasing time(ms)		≤ 6
5	Bounce time(ms)		≤ 1
6	Insulation resistance(MΩ) Test voltage:500V(1±10)d.c.	Under normal condition	≥ 100
		Under high temperature and high humidity and afterlife	≥ 50
7	Dielectric withstanding voltage Vr.m.s(50Hz)	Under normal condition	1000
		Under low atmospheric	250
8	Transiently suppressed coil back electromotive force (JQC-2105M)		≤ 42

6. Coil Characteristics

No.	Coil voltage		25°C			All temperature range	
	Nominal (Vd.c.)	Maximum (Vd.c.)	Coil Resistance (1±10%)Ω	Maximun operating voltage (Vd.c.)	Maximun release voltage (Vd.c)	Maximun operating voltage (Vd.c.)	Minimun drop out voltage (Vd.c.)
028	28.0	29.0	500	15.5	2.30	20.0	1.50
012	12.0	14.5	125	6.5	0.75	9.0	0.50

Special coil types available upon to request.

No.	Coil voltage		25°C			All temperature range	
	Nominal (Vd.c.)	Maximum (Vd.c.)	Coil Resistance (1±10%)Ω	Maximun operating voltage (Vd.c.)	Maximun release voltage (Vd.c)	Maximun operating voltage (Vd.c.)	Minimun drop out voltage (Vd.c.)
006	6.0	7.3	30	3.5	0.40	4.5	0.25

7. Product Ordering information

BSTQC-2105M - 028 3 4

① ② ③ ④ ⑤

① TypeBSTQC-2105M or BSTQC-2105M

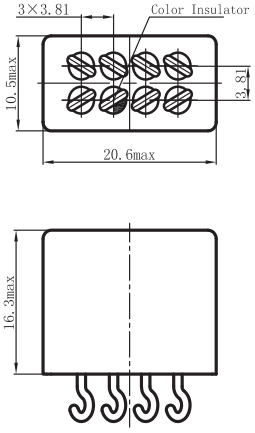
② Part

③ Terminal

④ Mounting code

⑤ Environment level

8. Mounting types



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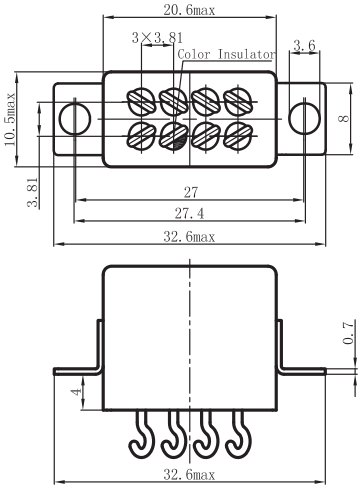

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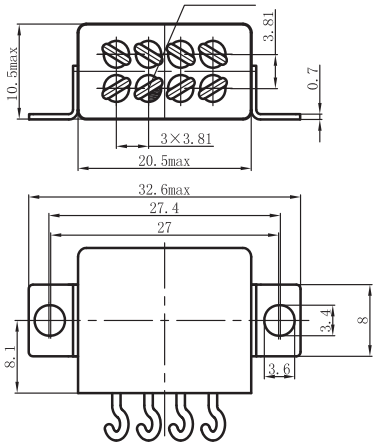

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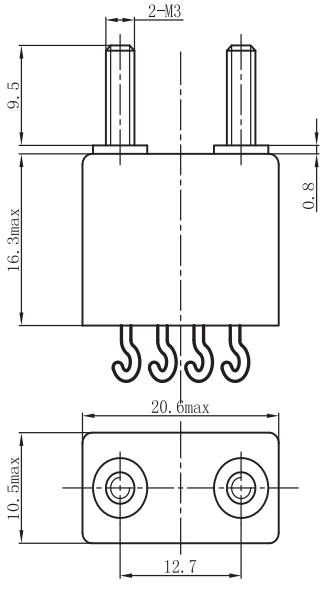

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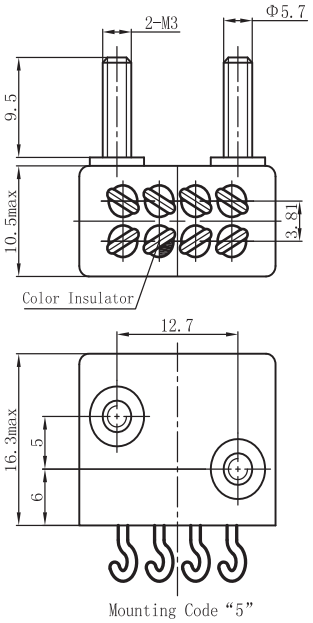

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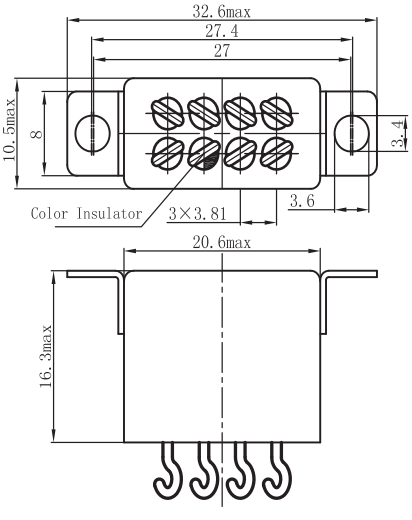
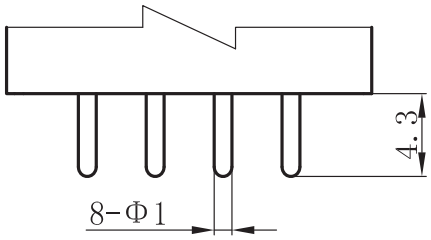


Mounting Code "8"

9. Terminal types



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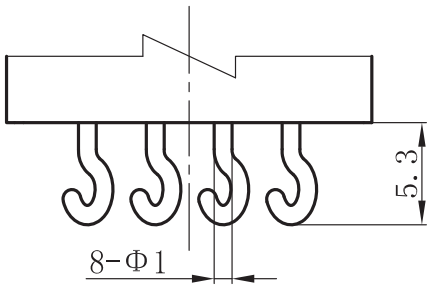

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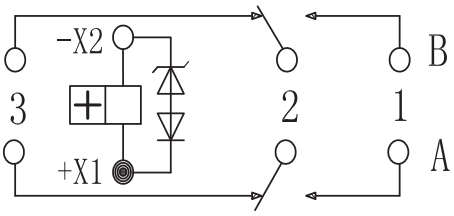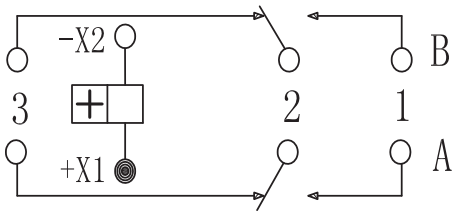
10. Bottom View