Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

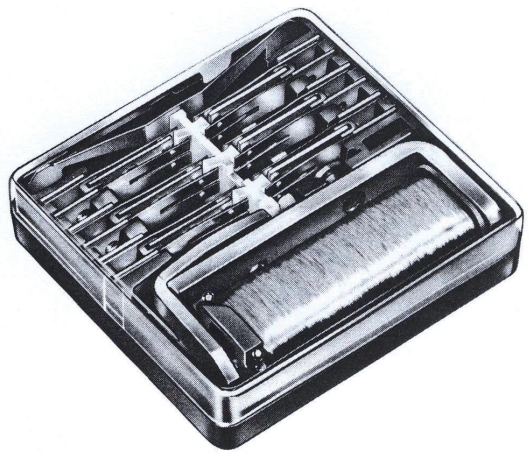
We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Card SN Relay V23030

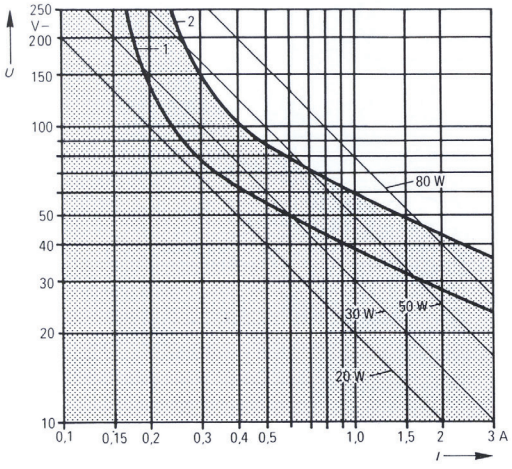
- **Low profile, therefore particularly suited for flat pack components grouping**
- **For relays with 1 or 2 form C (CO) contacts:**
  - **creepage and clearance distances between contacts and frame >5mm or >10mm (depending on the relay version)**
  - **dielectric strength between contacts and frame 4kV$_{rms}$ or 6kV$_{rms}$**



Typical applications
measuring and control systems, alarm and security equipment, road traffic and railway signaling systems

Contact Data	**A104**	**A106**	**A204**	**A206**
Contact arrangement	4 form C, (4 CO)	6 form C, (6 CO)	4 form C, (4 CO)	6 form C, (6 CO)
Max. switching voltage	250VDC 250VAC	250VDC 250VAC	30VDC 36VAC	30VDC 36VAC
Limiting continuous current				
≤50°C ambient	2A	2A	2A	2A
≤75°C ambient	1A	1A	1A	1A
Limiting making/breaking current	3A[1)]	3A[1)]	0.2A	0.2A
Contact material	Ag, Au-flashed	Ag, Au-flashed	Gold F[2)]	Gold F[2)]
Contact style	bifurcated contacts			
Frequency of operation, without load	max. 30 operations/s			
Operate / release time approx.	8/2ms			

Max. DC breaking capacity (contacts Ag, gold flashed)
Curve 1: arc extinguished within contact transit period (limit curve I)
Curve 2: safe breaking, arc extinguished (limit curve II)



Electrical endurance

Type	Load	Operations
Ag, gold-flashed	2.4A, 24VDC, resistive	appr. 1x10^6
Ag, gold-flashed	3A, 24VDC, resistive	appr. 0.3x10^6
Ag, gold-flashed	1.35A, 30VDC, resistive	appr. 6x10^6
Ag, gold-flashed	0.85A, 40VDC, resistive	appr. 2x10^7
Ag, gold-flashed	0.36A, 60VDC, resistive	appr. 8x10^7
Ag, gold-flashed	0.21A, 110VDC, rersitive	appr. 10x10^7
Ag, gold-flashed	2.4A, 24VDC, resistive+100µH3)	appr. 1x10^6
Ag, gold-flashed	0.6A, 60VDC, resistive+100µH3)	appr. 10x10^6
Ag, gold-flashed	0.24A, 110VDC, resistive+100µH3)	40x10^6

Contact Data (continued)	
Mechanical endurance	aaprox. 10^8 operations

1) The current of 3 A for max 4s at 10% on-time.
2) Gold F on request only
3) Self inductance in accordance with IEC 255-0-20

Coil Data	
Magnetic system	neutral, monostable
Coil voltage range	5 to 60VDC
Max. coil temperature	110°C
Thermal resistance	35K/W

Coil versions, monostable

Coil code	Rated voltage	Operate voltage 4/6 pole	Limiting Voltage	Coil resistance	Rated coil power
	VDC	VDC	VDC	Ω±10%[4)]	mW
032	5	3.3/4.0	10.8	38	658
012	6	3.9/4.6	12.4	50	720
017	12	7.8/9.5	24.0	185	778
021	24	15.5/18.5	47.0	730	789
026	48	32/37	88.0	2700[4)]	853
014	60	38/45	109.0	4100[4)]	878

4) Coil resistance ±15%
All figures are given for coil without pre-energization, at ambient temperature +23°C
The operating voltage limits U_I and U_{II} depend on temperature according to the following formula:
$U_{I\ tamb} = k_I * U_I$ 20°C, $U_{II\ tu} = k_{II} * U_{II}$ 20°C; t_{amb} = ambient temperature,
$U_{I\ tamb}$ = minimum voltage at ambient temperature,
$U_{II\ tamb}$ = maximum voltage at ambient temperature, k_I and k_{II} are factors.

t_{amb}	20°C	30°C	40°C	50°C	60°C	70°C
k_I	1	1.04	1.085	1.13	1.17	1.21
k_{II}	1	0.93	0.86	0.79	0.7	0.6

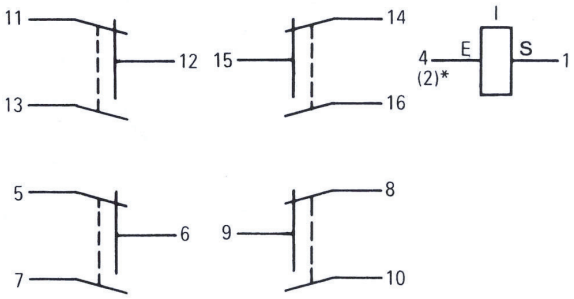
Insulation Data	
Initial dielectric strength	
between coil and frame	500V$_{rms}$
between contact and contact	1000V$_{rms}$
between contact and frame	1000V$_{rms}$
between contact and coil	1000V$_{rms}$

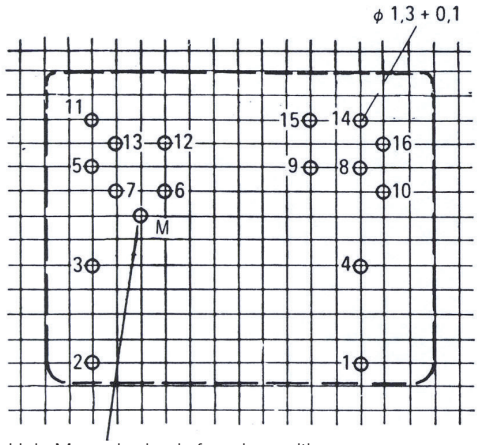
Card SN Relay V23030 (Continued)

Other Data	
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Ambient temperature	-40 to +70°C
Category of environmental protection	
IEC 61810	RT I - dust protected, RT III - immersion cleanable
Degree of protection, IEC 60529	IP30, IP67
Terminal type	PCB-THT
Weight	
V23030-Axxx	approx. 12g
V23030-Cxxx	approx. 30g
V23030-Hxxx	approx. 25g
V23030-Jxxx	approx. 30g
Ultrasonic cleaning	not recommended
Packaging unit	5 pcs.

PCB layout / terminal assignment
Bottom view on solder pins

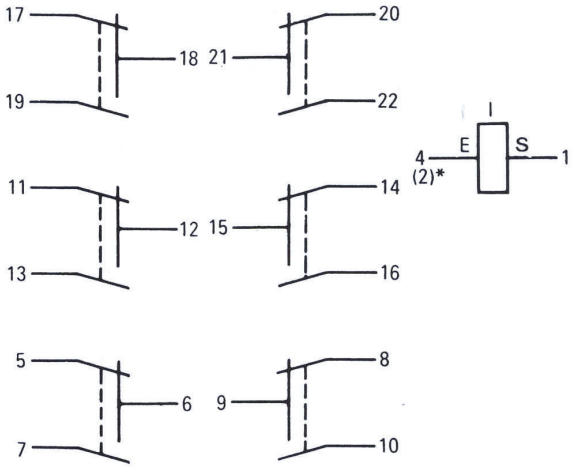
4 form C (4 CO) contacts
V23030-Axxxx-xx04
V23030-Hxxxx-xx04

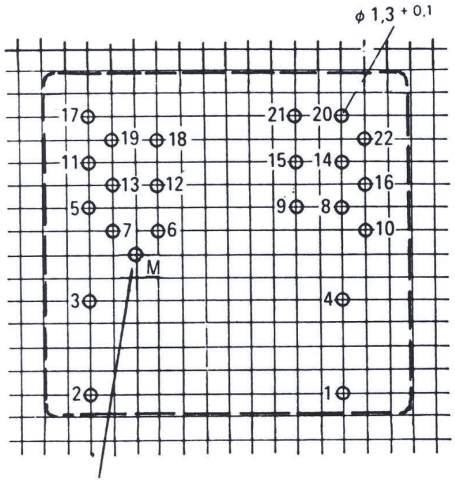




Hole M required only for relays with earth connection.

6 form C (6 CO) contacts
V23030-Axxxx-xx04
V23030-Hxxxx-xx04



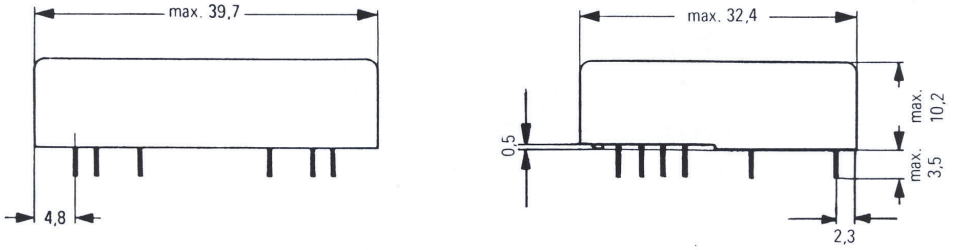


Hole M required only for relays with earth connection.

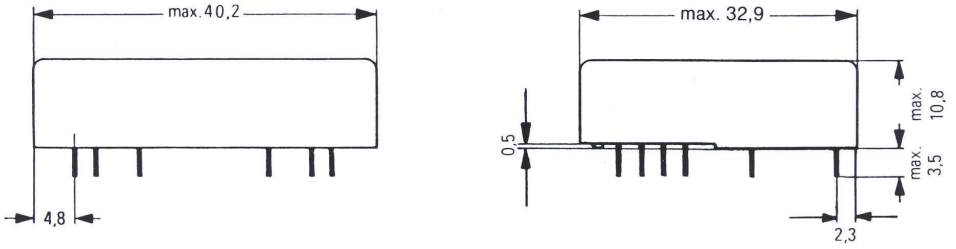
Card SN Relay V23030 (Continued)

Dimensions

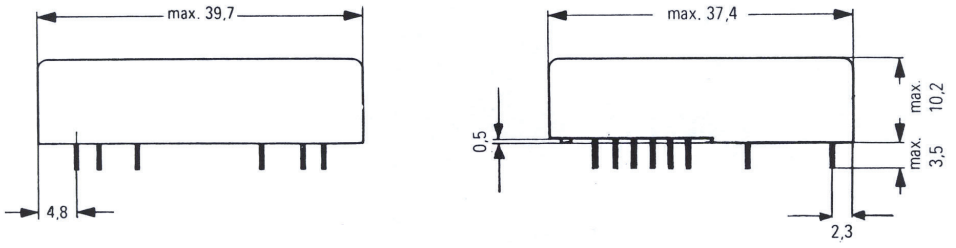
V23030-Axxx, 4 form C (4 CO) contacts, dust protected



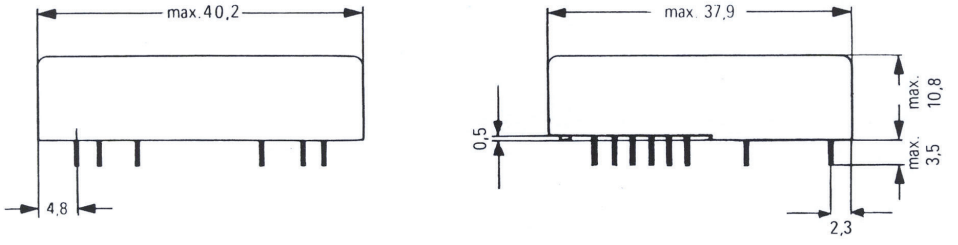
V23030-Hxxx, 4 form C (4 CO) contacts, immersion cleanable



V23030-Cxxx, 6 form C (6 CO) contacts, dust protected



V23030-Jxxx, 6 form C (6 CO) contacts, immersion cleanable



Card SN Relay V23030 (Continued)

Product code structure

Typical product code	V23030	-A	1	021	-A1	04

Type
V23030 Card SN Relay

Contact arrangement
A 4 form C, 4 CO, dust proof
C 6 form C, 6 CO, dust proof
H 4 form C, 4 CO, immersion cleanable
J 6 form C, 6 CO, immersion cleanable

Earth connection
1 Without earth connection
2 With earth connection

Coils
Coil code: please refer to coil versions table

Contact material
A1 Silver, gold flashed **A2** Gold F

Contact arrangement
04 4 form C, 4 CO **06** 6 form C, 6 CO

Other types on request

Product code	Version	Coil	Arrangement	Enclosure	Part number
V23030-A1xxx, 4 pole, without earth connection, dust protected					
V23030-A1017-A104	4 pole, without earth conn.	12VDC	4 form C (4 CO)	Dust protected	3-1393801-6
V23030-A1021-A104	4 pole, without earth conn.	24VDC	4 form C (4 CO)	Dust protected	3-1393801-8
V23030-A1026-A104	4 pole, without earth conn.	48VDC	4 form C (4 CO)	Dust protected	4-1393801-1
V23030-A2xxx, 4 pole, with earth connection, dust protected					
V23030-A2012-A104	4 pole, with earth conn.	6VDC	4 form C (4 CO)	Dust protected	4-1393801-4
V23030-A2017-A104	4 pole, with earth conn.	12VDC	4 form C (4 CO)	Dust protected	4-1393801-8
V23030-A2017-A204	4 pole, with earth conn.	12VDC	4 form C (4 CO)	Dust protected	4-1393801-9
V23030-A2021-A104	4 pole, with earth conn.	24VDC	4 form C (4 CO)	Dust protected	5-1393801-0
V23030-A2026-A104	4 pole, with earth conn.	48VDC	4 form C (4 CO)	Dust protected	5-1393801-2
V23030-A2014-A104	4 pole, with earth conn.	60VDC	4 form C (4 CO)	Dust protected	4-1393801-6
V23030-C1xxx, 6 pole, without earth connection, dust protected					
V23030-C1017-A104	6 pole, without earth conn.	12VDC	6 form C (6 CO)	Dust protected	6-1393801-2
V23030-C1021-A104	6 pole, without earth conn.	24VDC	6 form C (6 CO)	Dust protected	6-1393801-3
V23030-C1021-A204	6 pole, without earth conn.	24VDC	6 form C (6 CO)	Dust protected	6-1393801-4
V23030-C1026-A104	6 pole, without earth conn.	48VDC	6 form C (6 CO)	Dust protected	6-1393801-7
V23030-C2xxx, 6 pole, with earth connection, dust protected					
V23030-C2012-A104	6 pole, with earth conn.	6VDC	6 form C (6 CO)	Dust protected	6-1393801-9
V23030-C2017-A104	6 pole, with earth conn.	12VDC	6 form C (6 CO)	Dust protected	7-1393801-1
V23030-C2017-A204	6 pole, with earth conn.	12VDC	6 form C (6 CO)	Dust protected	7-1393801-2
V23030-C2021-A104	6 pole, with earth conn.	24VDC	6 form C (6 CO)	Dust protected	7-1393801-3
V23030-C2014-A104	6 pole, with earth conn.	60VDC	6 form C (6 CO)	Dust protected	7-1393801-0