



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!



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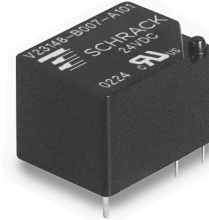
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Power PCB Relay U/UB

- 1 pole 7A, mono or bistable
- 1 form C (CO) or 1 form A (NO) or 1 form B (NC) contact
- Bistable and DC version
- Wash tight version
- Version for 10A on request



Typical applications
Heating control, installation, battery powered equipment

F0153-C



Approvals

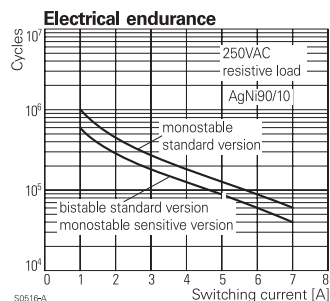
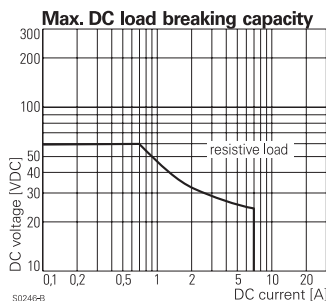
UL E214024
Technical data of approved types on request

Contact Data	Standard	Bistable	Sensitive
Contact arrangement	1 form C (CO) or 1 form A (NO) or 1 form B (NC)		
Rated voltage	250VAC		
Max. switching voltage	400VAC		
Rated current	7A	7A	5A
Limiting making current, max 4 s, duty factor 10%	12A	12A	12A
Breaking capacity max.	1750VA	1750VA	1250VA
Contact material	AgNi 90/10	AgNi 90/10	AgNi 90/10
Frequency of operation, with/without load	600/18000h ⁻¹		
Operate/release time typ.	5/ 3 ms	-	7/3 ms
Set/reset time typ.	-	5/ 3 ms	-
Bounce time typ., form A/form B	2/10ms	2/10ms	2/10ms

Contact ratings

Type	Contact	Load	Cycles
UL 508			
U/UB	C/A/B		
	(CO/NO/NC)	7A, 250VAC, general purpose, 40°C	6.000

Mechanical endurance, DC coil >20x10⁶ operations

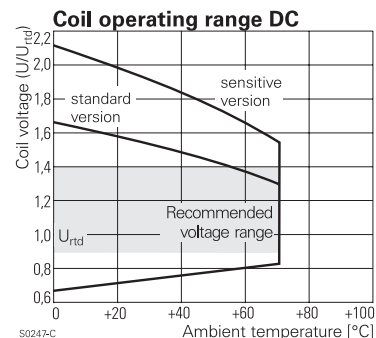


Coil Data	Standard	Bistable	Sensitive
Coil voltage range	6 to 48 VDC	6 to 48 VDC	6 to 48 VDC
Operative range IEC 61810	2	2	2
Reset voltage min., % of rated coil voltage	-	25%	-
Reset voltage max., % of rated coil voltage	-	45%	-
Rated operate power	-	900 to 1300 mW/20ms	-

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power mW
Standard coil					
003	6	4.2	0.6	80	450
005	12	8.4	1.2	320	450
007	24	16.8	2.4	1280	450
008	48	33.6	4.8	3800	606
Sensitive coil					
103	6	4.4	0.6	110	327
105	12	8.8	1.2	440	327
107	24	17.5	2.4	1780	324
108	48	35.0	4.8	4000	576

All figures are given for coil without pre-energization, at ambient temperature +23°C.
Other coil voltages on request.



Coil versions, bistable 1 coil

Coil code	Rated voltage VDC	Set voltage VDC	Reset voltage VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power mW
003	6	4.7	1.5	33	1091
005	12	9.4	3.0	119	1210
007	24	18.7	6.0	475	1213
008	48	37.4	12.0	1750	1317

All figures are given for coil without pre-energization, at ambient temperature +23°C.
Other coil voltages on request.

Power PCB Relay U/UB (Continued)

Insulation Data	2kV _{rms}	4kV _{rms}
	Version V23148-0***	Version V23148-1***
Initial dielectric strength		
between open contacts	1000V _{rms}	1000V _{rms}
between contact and coil	2000V _{rms}	4000V _{rms}
Clearance/creepage		
between contact and coil	≥2.5/2.5mm	≥3.5/3.5mm
Material group of insulation parts	≥IIIa	≥IIIa

Other Data

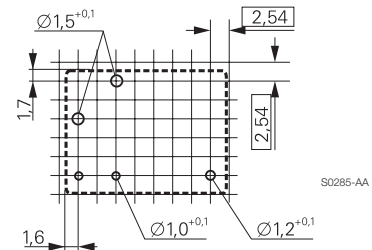
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

Ambient temperature	-25 to +70°C
Category of environmental protection	
IEC 61810	RTIII - wash tight
Vibration resistance (functional), form A/form B	10/10g
Shock resistance (functional), form A/form B	10/10g
Terminal type	PCB-THT
Weight	9.5 g
Resistance to soldering heat THT	
IEC 60068-2-20, wash tight version	260°C/5 s
Packaging unit	25 pcs.

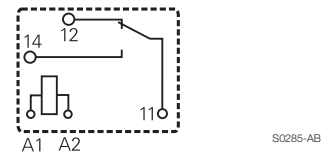
PCB layout / terminal assignment

Bottom view on solder pins

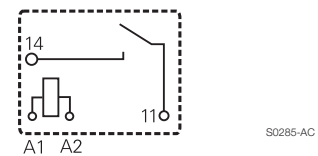
Monostable and bistable 1 coil



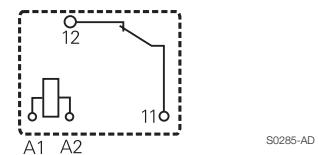
Form C contact (CO)



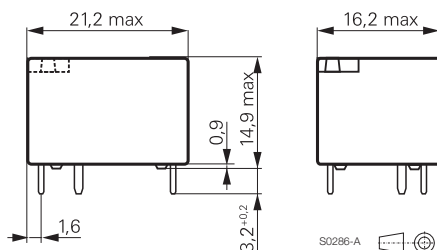
Form A contact (NO)



Form B contact (NC)



Dimensions



Power PCB Relay U/UB (Continued)

Product code structure

Typical product code **V23148 -A 0 0 07 -A 101**

Type

V23148 Power PCB Relay U/UB

Version

- A** Monostable (Miniature power relay U)
- B** Bistable (Miniature power relay UB, remanence version)

Dielectric strength coil-contact

0 2kV_{rms} **1** 4kV_{rms}

Version

- 0** Monostable Standard
- 1** Monostable Sensitive
- 0** Bistable Standard

Coil

03 6VDC **07** 24VDC
05 12VDC **08** 48VDC

Contact configuration

- A** 1 form C contact (1 CO)
- B** 1 form A contact (1 NO)
- C** 1 form B contact (1 NC)

Contact material

101 AgNi10

Other types on request

Product code	Version	Dielectric	Version	Arrangement	Part number
V23148-A0003-A101	Monostable	2000 V _{rms}	Standard	1 form C (CO)	1393203-4
V23148-A0003-B101	relay ,U'	contact-coil		1 form A (NO)	1393203-5
V23148-A0005-A101	AgNi10			1 form C (CO)	1393203-8
V23148-A0005-B101				1 form A (NO)	1393203-9
V23148-A0007-A101				1 form C (CO)	1-1393203-1
V23148-A0007-B101				1 form A (NO)	1-1393203-2
V23148-A0008-A101				1 form C (CO)	1-1393203-4
V23148-A0105-A101			Sensitive		2-1393203-1
V23148-A0107-A101					2-1393203-4
V23148-A1005-A101		4000 V _{rms}	Standard		2-1393203-7
V23148-A1007-A101		contact-coil			2-1393203-8
V23148-A1105-A101			Sensitive		2-1393203-9
V23148-A1107-A101					3-1393203-1
V23148-B0003-A101	Bistable	2000 V _{rms}	Standard		1393204-4
V23148-B0005-A101	relay ,UB'	contact-coil			1393204-7
V23148-B0007-A101	AgNi10				1-1393204-0
V23148-B0008-A101					1-1393204-3