

Miniature Relays Type 24/25/26

6813/2059E Ed IV

Components **ITT**

★ ITT Type 24/25/26 miniature relays are fully interchangeable in fit form and function with all well known continental types. ★

★ **ONE PIECE CORE AND YOKE**

giving improved magnetic efficiency and stability

★ **INTEGRAL TAG BOBBINS**

give rigid coil terminations

★ **POLYCARBONATE INSULATION**

negligible moisture absorption ensuring stability of spring-set adjustment

★ **BRITISH POST OFFICE & UNDERWRITERS LABORATORIES (US) File No. 57102 APPROVED**

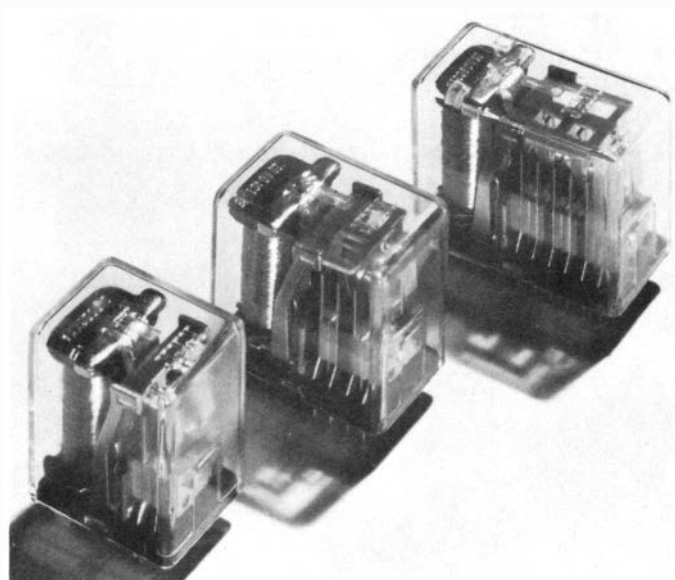
Built by professionals for professionals

Contact Data

A variety of contact materials is available in single and twin light duty form.

Heavy duty single contacts are available; these are listed below:-

This data sheet should be read in conjunction with Product Safety Information Sheet 6813/2059E ED IV. Failure to observe the ratings in this data sheet and the product safety information may result in a safety hazard.



LOAD DATA

	Light duty Contact materials			Heavy duty contact materials	
	A	B	C	D	E
	Silver	Gold/Nickel Alloy 95%: 5%	Silver/Palladium Alloy 40%: 60%	Large diameter heavy duty Silver	Silver/Cadmium oxide
Max. Switched Power a.c. (VA) d.c. (W)	60 30	40 20	100 50	250 100	500 100
Max. Switched Current (A) up to 1 x 10 ⁵ ops	2	—	—	—	—
up to 1 x 10 ⁶ ops	1	1	1	5*	5*
Max. Switched Voltage a.c. or d.c. (V)	110	110	110	250	250

* Depends on number of loaded contacts for type 260

ORDERING CODES

ITT miniature relays are ordered by means of a picture code for standard catalogued items:-

A	B	C	D	E
FRAME SIZE	CONTACT MATERIAL	SPRING-SET ARRANGEMENT	COIL No.	MOUNTING
24 (small)	A. Silver	0. Single	See next table	A. plug-in 8BA stud
25 (medium)	B. Gold/nickel 95%: 5%	1. Twin		B. plug-in 2,3mm stud
26 (large)	C. Silver/palladium 40%: 60% D. Large diameter heavy duty silver E. Silver cadmium oxide for inductive loads	2. Two		C. plug-in 3-48NC stud
		4. Four		M. plug-in M 2,2 ISO stud
		6. Six		D. Direct PC with earth
		C. Changeovers		E. Direct PC without earth
				F. 0.1 Direct PC with earth
				G. 0.1 Direct PC without earth

EXAMPLE

A	B	C	D	E
25	C	14C	09	F

Medium size relay, Silver/Palladium, twin contacts, four change-over coil voltage 5,4-9, 7 V d.c. 0.1 in printed circuit mounting with earth.

SOCKET CODES

	24	25	26
Solder-Type – Silver	FO10	FO16	FO22
Printed Circuit – Silver	FR10	FR16	FR22
Retaining Clip	165889	165888	HF223
Earthing Clip	165895	165895	165895

Note. Gold plated Sockets are available to special order.

RELAY SIZE (digits 1,2 of code)						24			25			26					
CONTACTS & SPRINGSET CODE (digits 3-6)	SINGLE		A02C		A12C		A04C		A14C		A06C		A16C				
	TWIN																
	HEAVY DUTY				DO2C		DO2C				DO4C		DO6C				
Contact terminations. The numbers correspond to those on the relay base.																	
STANDARD COIL PARAMETERS						Minimum Voltages at 20°C										Type 26 Nominal Voltage	
Coil Number	Coil Resistance	Tolerance (%)	Max. Volts at 20°C		Type 24/25 Nominal Voltage												
			TYPE 24/25	TYPE 26													
01	1.3	±10	1.5	1.7		0.38	0.57	0.57	0.57	0.57	0.85	0.85	0.76	0.95	0.95		
02	3	±10	2.3	2.6		0.58	0.88	0.88	0.88	0.88	1.32	1.32	1.17	1.47	1.47		
03	4.5	±10	2.8	3.2		0.69	1.04	1.04	1.04	1.04	1.56	1.56	1.39	1.74	1.74		
04	5	±10	3.0	3.3		0.72	1.08	1.08	1.08	1.08	1.62	1.62	1.44	1.80	1.80		
05	8.2	±10	3.8	4.3		0.94	1.42	1.42	1.42	1.42	2.13	2.13	1.90	2.37	2.37		
06	14	±10	5.0	5.6		1.25	1.88	1.88	1.88	1.88	2.82	2.82	2.51	3.10	3.10		
07	15	±10	5.2	5.8		1.29	1.94	1.94	1.94	1.94	2.91	2.91	2.59	3.23	3.23		
08	28	±10	7.1	7.9		1.8	2.7	2.7	2.7	2.7	4.0	4.0	3.6	4.5	4.5	6	
09	52	±10	9.7	10.8	6	2.4	3.6	3.6	3.6	3.6	5.4	5.4	4.8	6.0	6.0		
10	58	±10	10.2	11.4		2.6	3.9	3.9	3.9	3.9	5.8	5.8	5.2	6.5	6.5		
11	90	±10	12.7	14.2		3.2	4.8	4.8	4.8	4.8	7.3	7.3	6.5	8.1	8.1		
12	110	±10	14.1	15.7		3.5	5.3	5.3	5.3	5.3	8.0	8.0	7.1	8.9	8.9		
13	150	±10	16.4	18.3		4.2	6.3	6.3	6.3	6.3	9.4	9.4	8.4	10.5	10.5	12	
14	185	±10	18.2	20.4	12	4.9	7.4	7.4	7.4	7.4	11.1	11.1	9.9	12.3	12.3		
15	220	±10	19.9	22.2		5.1	7.6	7.6	7.6	7.6	11.5	11.5	10.2	12.7	12.7		
16	280	±10	22.4	25.1		5.9	8.9	8.9	8.9	8.9	13.4	13.4	11.9	14.8	14.8		
17	325	±10	24.2	27.0		6.2	9.2	9.2	9.2	9.2	13.8	13.8	12.3	15.4	15.4		
18	430	±10	27.8	31.1		7.0	10.5	10.5	10.5	10.5	15.8	15.8	14.1	17.5	17.5		
19	530	±10	30.9	34.5		8.0	12.1	12.1	12.1	12.1	18.1	18.1	16.1	20	20	24	
20	700	±10	35.5	39.7	24	9.8	14.7	14.7	14.7	14.7	22	22	19.5	24	24		
21	890	±10	40.0	44.7		10.7	16.1	16.1	16.1	16.1	24	24	21	26	26		
22	1250	±10	47.4	53.0	36	12.9	19.4	19.4	19.4	19.4	29	29	26	32	32	36	
23	1700	±10	55.3	61.8		14.2	21	21	21	21	32	32	29	36	36		
24	2500	±15	65.2	72.9	48	18.8	28	28	28	28	42	42	36	45	45	48	
25	3300	±15	74.9	83.7		20	30	30	30	30	45	45	40	50	50	72	
26	5800	±15	99.3	110.0	72	30	44	44	44	44	67	67	59	74	74		
27	7600	±15	113.7	127.1		33	50	50	50	50	75	75	67	83	83		
28	15000	±15	159.7	178.5		55	82	82	82	82	124	124	110	138	138		
29	20900	±15	188.0	210.7		58	87	87	87	87	131	131	117	146	146		
Ambient temperature range						-40°C to +80°C											
Test voltages						1000 V r.m.s. 50 Hz											
contact to contact																	
contact to frame																	
coil to frame																	
coil to contacts																	

BPO type 23 Relays

ITT relays Type 24/25 are designated Type 23 by the British Post Office

The following list quotes all British Post Office codes (at time of printing) together with specification.

SILVER/PALLADIUM CONTACTS

BPO Code	Coil resistance at 20°C	Mounting	Contact Action (all are twin)	Special ITT codes
23/1	3300	Plug-in	2C	241TAA
23/1 PW	3300	PC 0.1 in.	2C	247TAA
23/2	1800	Plug-in	4C	251TAA
23/2 PW	1800	PC 0.1 in.	4C	257TAA
23/3	1800	Plug-in	6M	251TAB
23/3 PW	1800	PC 0.1 in.	6M	257TAB
23/4	890	Plug-in	4C	251TAC
23/4 PW	890	PC 0.1 in.	4C	257TAC
23/5	890	Plug-in	6M	251TAD
23/5 PW	890	PC 0.1 in.	6M	257TAD
23/6	1800	Plug-in	2C+2K	251TAE
23/6 PW	1800	PC 0.1 in.	2C+2K	257TAE
23/7	890	Plug-in	2C	241TAB
23/7 PW	890	PC 0.1 in.	2C	247TAB
23/8	150	Plug-in	2C+2K	251TAF
23/8 PW	150	PC 0.1 in.	2C+2K	257TAF
23/9	530	Plug-in	2C	241TAC
23/9 PW	530	PC 0.1 in.	2C	247TAC
23/10	530	Plug-in	4C	251TAG
23/10 PW	530	PC 0.1 in.	4C	257TAG
23/11	890	Plug-in	2K	241TAD
23/11 PW	890	PC 0.1 in.	2K	247TAD
23/12	220	Plug-in	2C	241TAE
23/12 PW	220	PC 0.1 in.	2C	247TAE
23/13	28	Plug-in	2C+2K	251TAH
23/13 PW*	28	PC 0.1 in.	2C+2K	257TAH
23/14	2200	Plug-in	6M	251TAJ
23/14 PW	2200	PC 0.1 in.	6M	257TAJ
23/15	2200	Plug-in	6B	251TAK
23/15 PW	2200	PC 0.1 in.	6B	257TAK
23/16	2200	Plug-in	4C	251TAL
23/16 PW	2200	PC 0.1 in.	4C	257TAL
23/17	530	Plug-in	6M	251TAM
23/17 PW	530	PC 0.1 in.	6M	257TAM
23/18	325	Plug-in	2C	241TAF
23/18 PW	325	PC 0.1 in.	2C	247TAF
23/19	150	Plug-in	4C	251TAN
23/19 PW	150	PC 0.1 in.	4C	257TAN
23/20	2200	Plug-in	2C	241TAG
23/20 PW	2200	PC 0.1 in.	2C	247TAG
23/21	2200	Plug-in	2C+2K	251TAP
23/21 PW	2200	PC 0.1 in.	2C+2K	257TAP
23/22	7600	Plug-in	2C	241TAH
23/22 PW	7600	PC 0.1 in.	2C	247TAH
23/23	3300	Plug-in	2K	241TAJ
23/23 PW	3300	PC 0.1 in.	2K	247TAJ
23/24*	220	Plug-in	4C	251TAQ
23/24 PW	220	PC 0.1 in.	4C	257TAQ
23/25	110	Plug-in	2C	241TAK
23/25 PW	110	PC 0.1 in.	2C	247TAK
23/26	220	Plug-in	2C+2K	251TAR
23/26 PW	220	PC 0.1 in.	2C+2K	257TAR
23/27*	220	Plug-in	6M	251TAS
23/27 PW	220	PC 0.1 in.	6M	257TAS
23/28 PW	58	PC 0.1 in.	2C	247TAL
23/29 PW	150	PC 0.1 in.	6M	257TAT
23/30 PW	220	PC 0.1 in.	2K	247TAM

GOLD CONTACTS

32/1 PW	3300	PC 0.1 in.	2C	247XAL
32/2 PW	890	PC 0.1 in.	6M	257XAC
32/3 PW	890	PC 0.1 in.	2C	247XAM
32/4 PW	2200	PC 0.1 in.	4C	257XAB

*These codes not yet formally issued by P.O.

NOTE

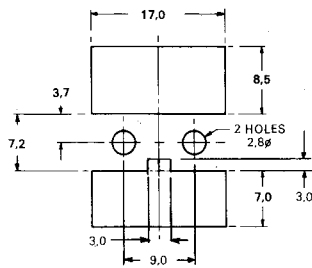
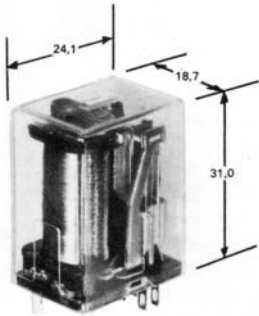
Operation outside the stated ratings may result in premature failure or a safety hazard

Additional Contact Actions

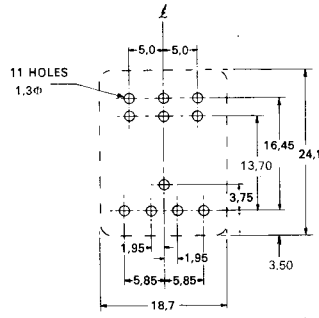
In addition to the 2C, 4C, 6C and Post Office versions of cradle relays detailed in this data sheet ITT offers a wide range of other contact actions which are available on request.

Type 24

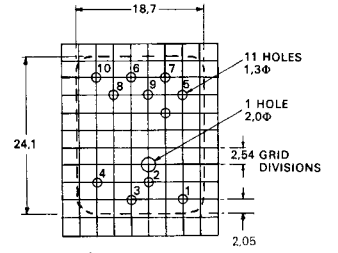
Dimensions (mm)



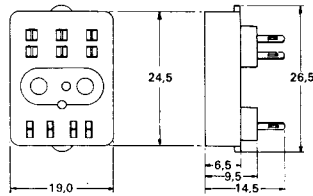
Suggested panel cutout for chassis mounting



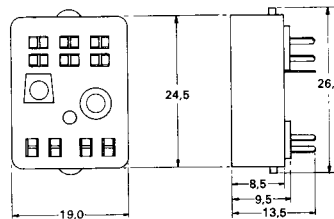
Drilling plan for in line pcb mounting



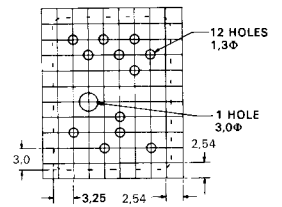
Drilling plan 0,1 in. modular mounting (view from underside)



Socket for solder/chassis mounting

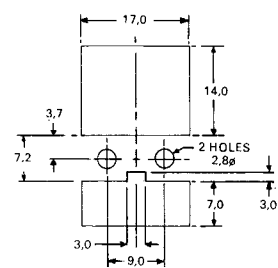
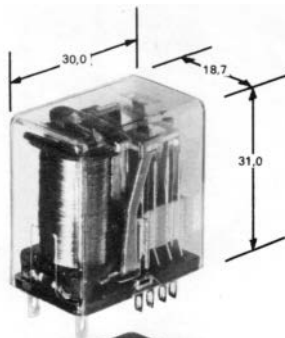


Socket for pcb mounting

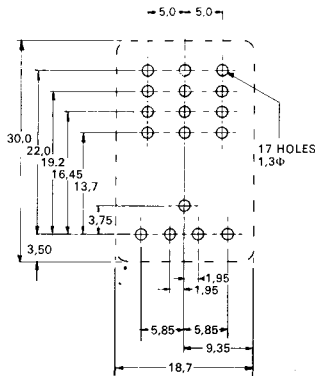


Drilling plan for pcb socket

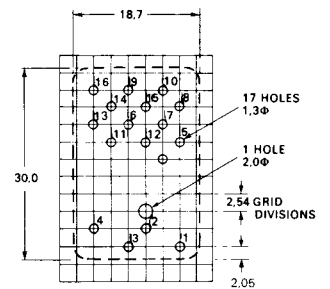
Type 25



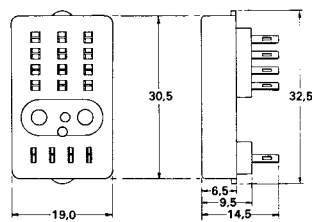
Suggested panel cutout for chassis mounting



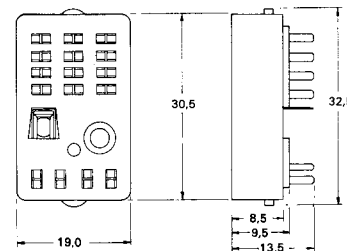
Drilling plan for in line pcb mounting



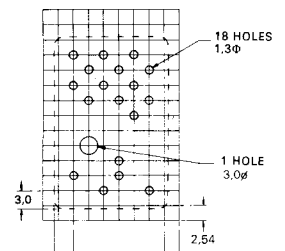
Drilling plan 0,1 in. modular mounting (view from underside)



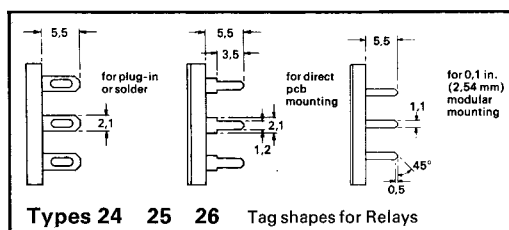
Socket for solder/chassis mounting



Socket for pcb mounting

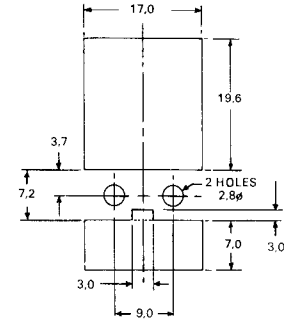
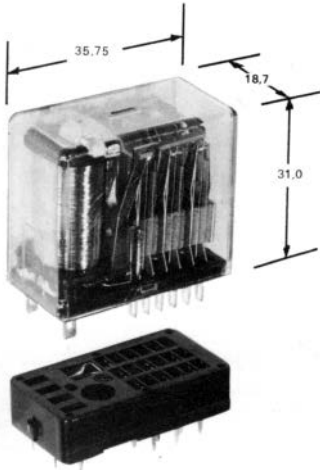


Drilling plan for pcb socket

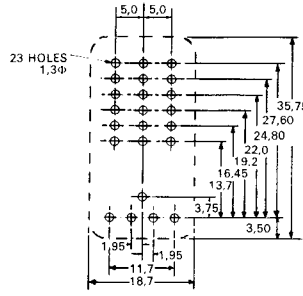


Types 24 25 26 Tag shapes for Relays

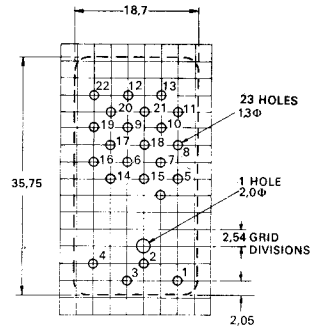
Type 26



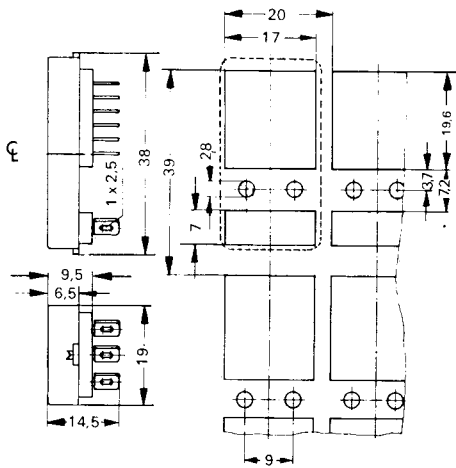
Suggested panel cutout for chassis mounting



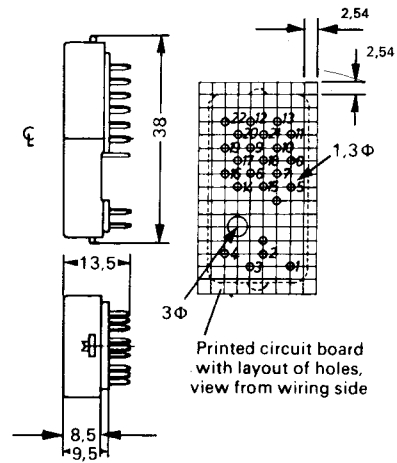
Drilling plan for in line pcb mounting



Drilling plan 0,1 in. modular mounting (view from underside)



Socket for solder/chassis mounting



Socket for pcb mounting

ITT Components are also available from :

UK Distributors:

ITT Electronic Services Harlow 26777 Telex 81146

Branches:-

Area		Phone No.	Telex
Scotland	Johnstone	24357	778622
North	Manchester	(061)834 7827/8	669177
Midlands	Leicester	(0533) 548292	341237
West & Wales	Bristol	(0272) 290125	449260
Eire	Dublin	307522	30991

ECCS

Wellington (0952) 54161

Nobel Electronics Ltd.

01-855 5671

or directly from:

ITT Components Group Europe

Standard Telephones and Cables Limited

Relay Division

P.O. Box 1

West Road

Harlow, Essex CM20 2HD

Tel: Harlow (0279) 26811 Ext. 2041/2251

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