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Miniature PCB Relay SDT-R

- **10A contact rating**
- **UL TV-5 and TV-8 rating**
- **1 form A (NO) contact arrangement**
- **Sensitive and standard coils available**



Typical applications
Appliances, HVAC, cable TV, monitor display

Approvals

UL E58304, TUV R50138781, VDE 40019832, CQC03001002917
Technical data of approved types on request

Contact Data

Contact arrangement	1 Form A (NO)
Rated voltage	250VAC, 30VDC
Max. switching voltage	250VAC, 30VDC
Rated current	5 to 10A
Contact material	$AgSnO_2$
Min. recommended contact load	100mA at 5VDC
Frequency of operation	360 ops./h
Operate/release time max.	15/5ms
Electrical endurance SDT-LMR(2): 5A, 250VAC res, 70°C $100x10^3$ ops. TV-5, 120VAC $25x10^3$ ops. SDT-DMR(2): 10A, 250VAC res, , 70°C $100x10^3$ ops. TV-8, 120VAC $25x10^3$ ops.	
Contact ratings	5 to 10A
Mechanical endurance, DC coil	$10x10^6$ operations

Coil Data

Coil voltage range	3 to 48VDC
Operative range, IEC 61810	1
Coil insulation system according UL	Class E

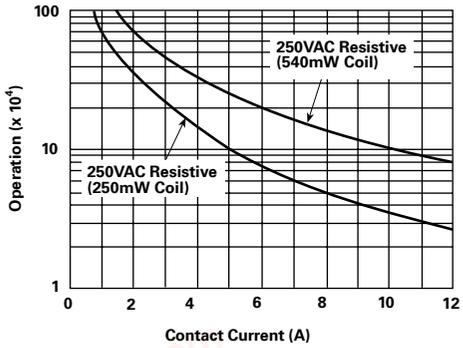
Contact Data (continued)

Coil versions, DC coil

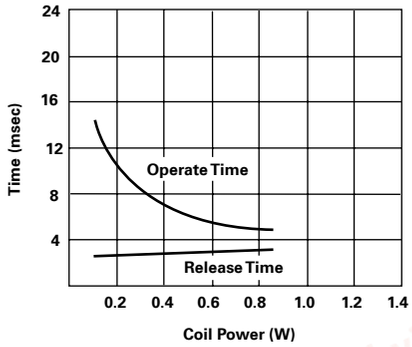
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
SDT-LMR & SDT-DMR2					
003	3	2.25	0.3	36	250
005	5	3.75	0.5	100	250
006	6	4.50	0.6	144	250
009	9	6.75	0.9	324	250
012	12	9.00	1.2	576	250
018	18	13.50	1.8	1296	250
024	24	18.00	2.4	2304	250
SDT-DMR					
003	3	2.25	0.3	16.7	540
005	5	3.75	0.5	46.3	540
006	6	4.50	0.6	66.7	540
009	9	6.75	0.9	150	540
012	12	9.00	1.2	267	540
018	18	13.50	1.8	600	540
024	24	18.00	2.4	1067	540
048	48	36.00	4.8	4267	540
SDT-LMR2					
003	3	2.25	0.3	60	150
005	5	3.75	0.5	167	150
006	6	4.50	0.6	240	150
009	9	6.75	0.9	540	150
012	12	9.00	1.2	960	150
018	18	13.50	1.8	2160	150
024	24	18.00	2.4	3840	150

All figures are given for coil without pre-energization, at ambient temperature +23°C

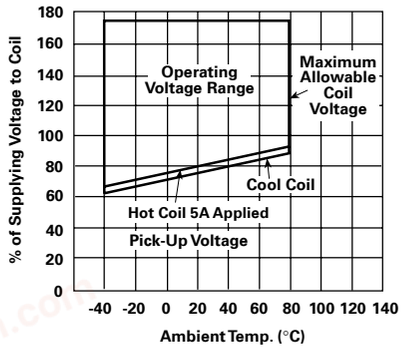
Electrical endurance



Operate time



Coil operative range



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Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

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Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change.

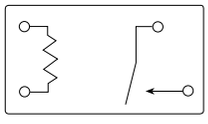
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Miniature PCB Relay SDT-R (Continued)

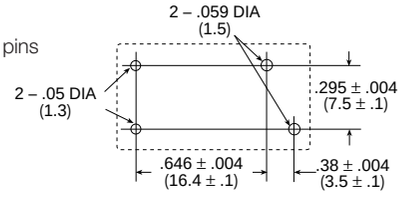
Insulation Data	
Initial dielectric strength	
between open contacts	1000V_{rms}
between contact and coil	4000V_{rms}
Clearance/creepage	
between contact and coil	>1.6/3.2mm

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	-30°C to +70°C
Category of environmental protection	
IEC 61810	RTII - flux proof, RTIII - wash tight
Shock resistance (functional)	10g
Shock resistance (destructive)	100g
Weight	11g
Resistance to soldering heat THT	
IEC 60068-2-20	RTII: 270°C/10s RTIII: 260°C/5s
Packaging/unit	tube/25 pcs., carton box/1000 pcs. tray/100 pcs., carton box/1000 pcs.

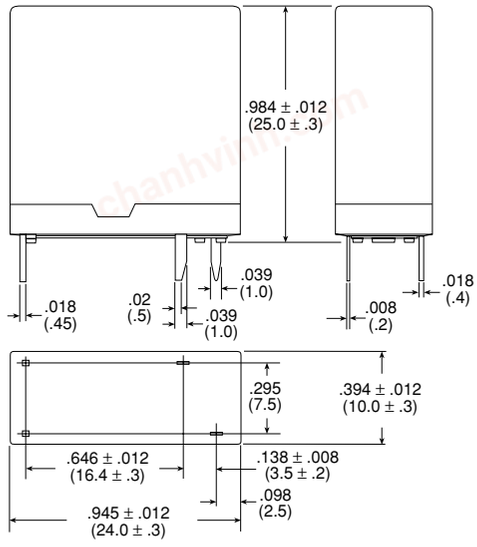
Terminal assignment
Bottom view on solder pins



PCB layout
Bottom view on solder pins



Dimensions



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Miniature PCB Relay SDT-R (Continued)

Product code structure	Typical product code	SDT	-S	-1	12	D	M	R	2	,000

Basic type
SDT Miniature PCB Relay SDT-R

Enclosure
S Snap on cover

Number of poles
1 1 pole

Coil voltage
Coil code: please refer to coil versions table (e.g. 05=5VDC)

Coil input
D Standard (540mW) **L** Sensitive (250mW)

Contact arrangement
M 1 form A (NO) contact

Design
R New design

Coil type
Blank Standard **2** as LMR2: 150mW coil consumption
as DMR2: 250mW coil consumption

Suffix
,000 Standard

Other types on request

Product code	Coil	Coil sensitivity	Design	Cont.material	Arrangement	Coil type	Part number
SDT-S-105LMR,000	5VDC	Sensitive	new design	$AgSnO_2$	1 form A (NO)	250mW	8-1419125-1
SDT-S-112LMR,000	12VDC					standard coil	9-1419125-9
SDT-S-124LMR,000	24VDC						1419126-2
SDT-S-103DMR,000	3VDC	Standard				540mW coil	1461267-1
SDT-S-105DMR,000	5VDC					standard coil	8-1419125-0
SDT-S-112DMR,000	12VDC						9-1419125-7
SDT-S-118DMR,000	18VDC						1461267-3
SDT-S-124DMR,000	24VDC						1419126-1
SDT-S-148DMR,000	48VDC						1461023-2
SDT-S-105LMR2,000	5VDC	Sensitive				150mW coil	8-1419125-3
SDT-S-109LMR2,000	9VDC						9-1419125-5
SDT-S-105DMR2,000	5VDC	Standard				250mW coil	9-1440002-6
SDT-S-109DMR2,000	9VDC						9-1440002-8

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