

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

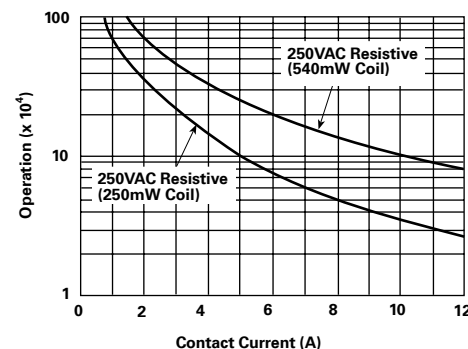
Contact Data (continued)

Coil versions, DC coil

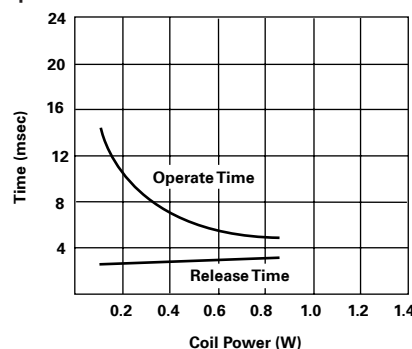
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power mW
SDT-LMR & SDT-DMR2					
003	3	2.25	0.3	36	250
005	5	3.75	0.5	100	250
006	6	4.50	0.6	144	250
009	9	6.75	0.9	324	250
012	12	9.00	1.2	576	250
018	18	13.50	1.8	1296	250
024	24	18.00	2.4	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

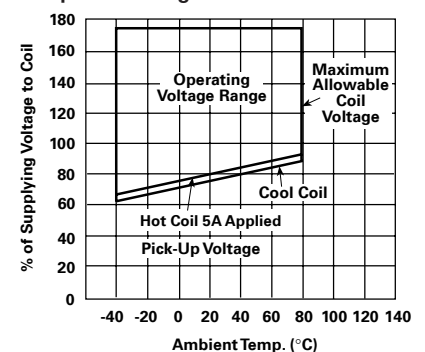
Electrical endurance



Operate time



Coil operative range



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

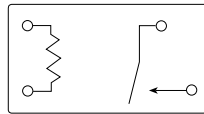
Other Data

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.

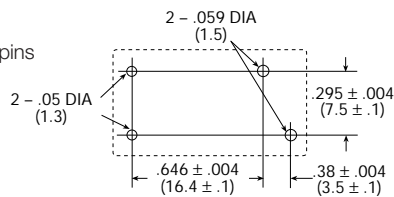
Terminal assignment

Bottom view on solder pins

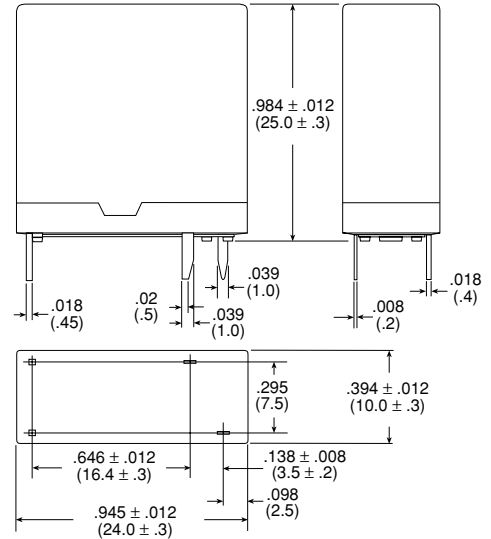


PCB layout

Bottom view on solder pins



Dimensions



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

Mouser Electronics

Authorized Distributor

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[8-1419125-1](#)