

**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 <sub>2</sub>
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 <sup>3</sup> ops.
TV-5, 120VAC	25x10 <sup>3</sup> ops.
SDT-DMR(2): 10A, 250VAC res, , 70°C	100x10 <sup>3</sup> ops.
TV-8, 120VAC	25x10 <sup>3</sup> ops.
Contact ratings	5 to 10A
Mechanical endurance, DC coil	10x10 <sup>6</sup> operations

**Coil Data**

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

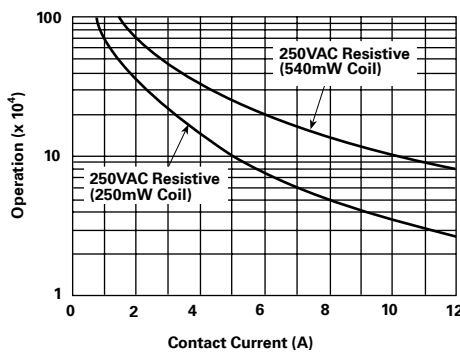
**Contact Data (continued)**

**Coil versions, DC coil**

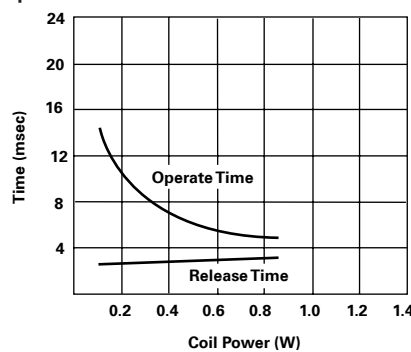
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
<b>SDT-LMR &amp; SDT-DMR2</b>					
003	3	2.25	0.3	36	250
005	5	3.75	0.5	100	250
006	6	4.50	0.6	144	250
009	9	6.75	0.9	324	250
012	12	9.00	1.2	576	250
018	18	13.50	1.8	1296	250
024	24	18.00	2.4	2304	250
<b>SDT-DMR</b>					
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
<b>SDT-LMR2</b>					
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

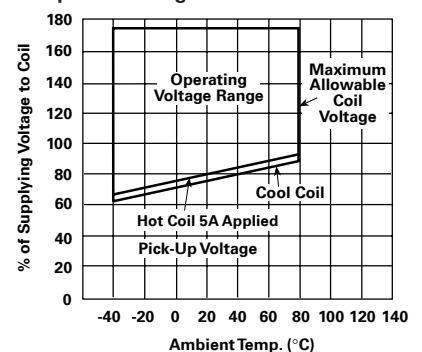
**Electrical endurance**



**Operate time**



**Coil operative range**



**Miniature PCB Relay SDT-R** (Continued)

**Insulation Data**

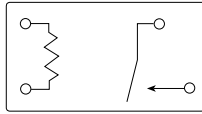
Initial dielectric strength	
between open contacts	1000V <sub>rms</sub>
between contact and coil	4000V <sub>rms</sub>
Clearance/creepage	
between contact and coil	>1.6/3.2mm

**Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at <a href="http://www.te.com/customersupport/rohssupportcenter">www.te.com/customersupport/rohssupportcenter</a>	
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.

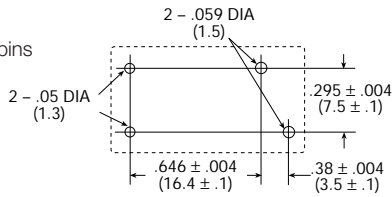
**Terminal assignment**

Bottom view on solder pins

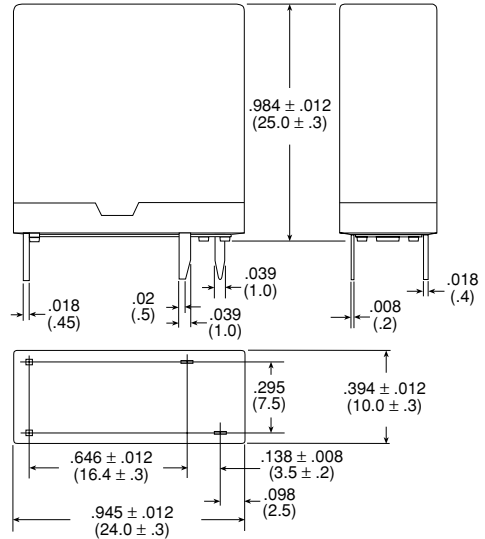


**PCB layout**

Bottom view on solder pins



**Dimensions**



**Miniature PCB Relay SDT-R** (Continued)

<b>Product code structure</b>	Typical product code	<b>SDT</b>	<b>-S</b>	<b>-1</b>	<b>12</b>	<b>D</b>	<b>M</b>	<b>R</b>	<b>2</b>	<b>,000</b>
<b>Basic type</b>	<b>SDT</b> Miniature PCB Relay SDT-R									
<b>Enclosure</b>	<b>S</b> Snap on cover									
<b>Number of poles</b>	<b>1</b> 1 pole									
<b>Coil voltage</b>	Coil code: please refer to coil versions table (e.g. 05=5VDC)									
<b>Coil input</b>	<b>D</b> Standard (540mW)					<b>L</b> Sensitive (250mW)				
<b>Contact arrangement</b>	<b>M</b> 1 form A (NO) contact									
<b>Design</b>	<b>R</b> New design									
<b>Coil type</b>	<b>Blank</b> Standard			<b>2</b> as LMR2: 150mW coil consumption as DMR2: 250mW coil consumption						
<b>Suffix</b>	<b>,000</b> 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 <sub>2</sub>	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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