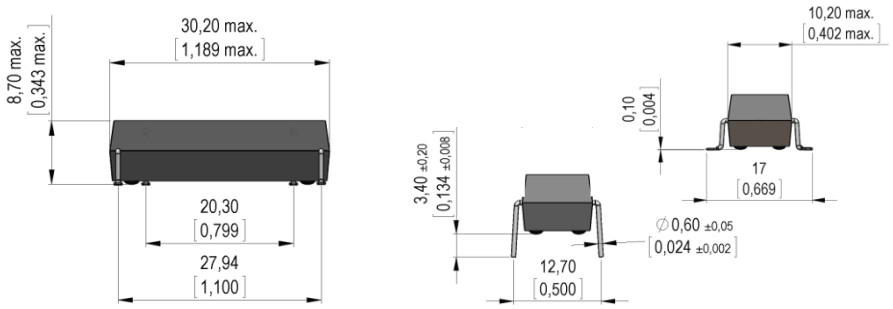
KT Series Reed Relays



- Features: High Voltage Through-Hole or SMD Relay, High Dielectric Strength, AEC-Q200 Certified
- Applications: Inverters in Photovoltaic Collectors, Automotive, Battery Management Systems & Others
- Markets: E-Cars, Solar & Others, Test & Measurement & Others

Part Description: KT 00-1A-40L-XXX

Coil Voltage	Contact QTY	Contact Form	Pin Out	Version
05, 12, 24	1	A	40L	THT, SMD

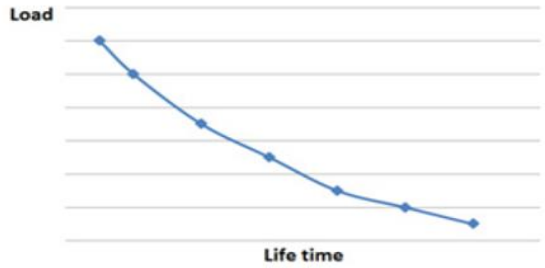
Customer Options	Switch Model	Unit
Contact Data	**85**	
Rated Power (max.) Any DC combination of V&A not to exceed their individual max.'s	100	W
Switching Voltage (max.) DC or peak AC	1,000	V
Switching Current (max.) DC or peak AC	1.0	A
Carry Current (max.) DC or peak AC	2.5	A
Contact Resistance (max.) @ 0.5V & 50mA	150	mOhm
Breakdown Voltage (min.) According to EN60255-5	3.0	kVDC
Operating Time (max.) Incl. Bounce; Measured with w/ Nominal Voltage	1.1	ms
Release Time (max.) Measured with no Coil Excitation	0.1	ms
Insulation Resistance (typ.) Rh<45%, 100V Test Voltage	10^{10}	Ohm
Capacitance (typ.) @ 10kHz across open Switch	0.5	pF

Coil Data		Coil Voltage (nom.)	Coil Resistance (typ.)	Pull-In Voltage (max.)	Drop-Out Voltage (min.)	Nominal Coil Power (typ.)
Contact Form	Switch Model					
Unit		VDC	Ohm	VDC	VDC	mW
1A	85	05	80	3.5	0.6	313
		12	475	8.4	1.4	303
		24	1,800	16	2.9	320
The Pull-In / Drop-Out Voltage and Coil Resistance will change at rate of 0.4% per °C.						

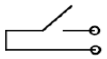
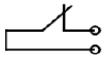
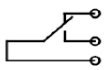
Relay Data		Unit
Dielectric Strength Coil/Contact (min.) according to EN60255-5	7	kVDC
Insulation Resistance Coil/Contact (typ.) Rh<45%, 200V Test Voltage	10^{13}	Ohm
Capacitance Coil/Contact (typ.) @ 10 kHz	1.2	pF
Shock Resistance (max.) 1/2 sine wave duration 11ms	30	g
Vibration Resistance (max.)	20	g
Operating Temperature	-40 to 100	°C
Storage Temperature	-40 to 125	°C
Soldering Temperature (max.) 5 sec. max.	260	°C
Washability	Fully Sealed	

Life Test Data

*Load increase reduces life expectancy of Reed Switches



Glossary Contact Form

Form A	NO = Normally Open Contacts SPST = Single Pole Single Throw	
Form B	NC = Normally Closed Contacts SPST = Single Pole Single Throw	
Form C	Changeover SPDT = Single Pole Double Throw	

KT Reed Relay

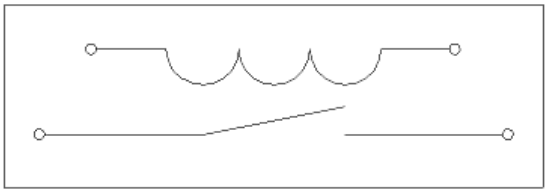
Handling & Assembly Instructions

- Switching inductive and/or capacitive loads create voltage and/or current peaks, which may damage the relay. Protective circuits need to be used.
- External magnetic fields needs to be taken into consideration, including a too high packing density. This may influence the relays' electrical characteristics.
- Mechanical shock impacts e.g. dropping the relays may cause immediate or post-installation failure.
- Wave soldering: maximum 260°/5 seconds.
- Reflow soldering: Recommendations given by the soldering paste manufacturer need to be considered as well as the temperature limits of other components/processes.

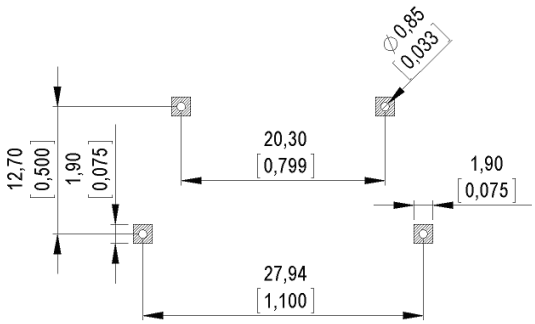
REACH COMPLIANT RoHS COMPLIANT

Layout

Top View



Pad-Layout SMD



Pad-Layout THT