

汽车继电器Automotive Relay

30A/40A

特性 / FEATURES

- 40A触点切换能力
40A switching capability
- 一组常开、一组转换触点形式
1 Form A & 1 Form C contact arrangement
- 密封型和敞开型两种封装方式
Both sealed and open type available
- 美式和欧式两种引出端尺寸
Both American and European terminal dimensions



RoHS
Compliant

订购信息 / ORDERING INFORMATION

SLB-12VDC-S L-C E

E:欧式European style/无:美式American style	引出端尺寸 Terminal Dimensions
A / C	触点形式 Contact Arrangement
L:1.8W H:1.6W	线圈功率 Coil Power
S 密封/Sealed 无:敞开/Open type	封装形式 Construction
6VDC/12VDC/24VDC	线圈电压 Coil Voltage
	型 号 Model

触点参数 / CONTACT PARAMETERS

触点形式	Contact arrangement	A / C
接触压降(10A下测量)	Voltage drop (at 10A)	≤200mV
触点材质	Contact material	银合金/Silver alloy: AgSnO ₂ In ₂ O ₃ 、AgSnO ₂ 、AgNi
触点负载	Contact rating	30A/40A 14VDC
最大切换电压	Max switching voltage	75VDC
最大切换电流	Max switching current	接通/Make: 100A (灯负载浪涌电流/Lamp, Inrush current) 断开/Break: 60A (阻性/Resistive)
电耐久性 (频率:每小时1800次)	Electrical endurance (Frequency:1800 ops/h)	1×10 ⁵ ops
机械耐久性 (频率:每小时18000次)	Mechanical endurance (Frequency:18000 ops/h)	1×10 ⁷ ops

汽车继电器
Automotive Relay

30A/40A

特性参数 / CHARACTERISTICS PARAMETERS

绝缘等级	Insulation level	B / F	
绝缘电阻	Insulation resistance	100MΩ (500VDC)	
介质耐压 (漏电流 1mA)	Dielectric strength (Leakage current 1mA)	线圈与触点间耐压 Dielectric strength (Between coil and contacts)	500VAC 1分钟/minute
		断开触点间耐压 Dielectric strength (Between open contacts)	500VAC 1分钟/minute
吸合时间(额定电压下)	Operate time(at nominal voltage)	≤10ms	
释放时间(额定电压下)	Release time (without diode)(at nominal voltage)	≤10ms	
湿度	Humidity	5% ~ 85% RH	
环境温度	Ambient temperature	-40℃ ~ +125℃	
抗振动	Vibration resistance	10~40Hz 1.27mm 双振幅/Double amplitude 40~70Hz 49m/s ²	
		70~100Hz 0.5mm 双振幅/Double amplitude 100~500Hz 98m/s ²	
抗冲击	Shock resistance	98m/s ²	
重量	Weight	约/Approx 19g	
封装形式	Construction	密封型/Sealed 敞开型/Open	

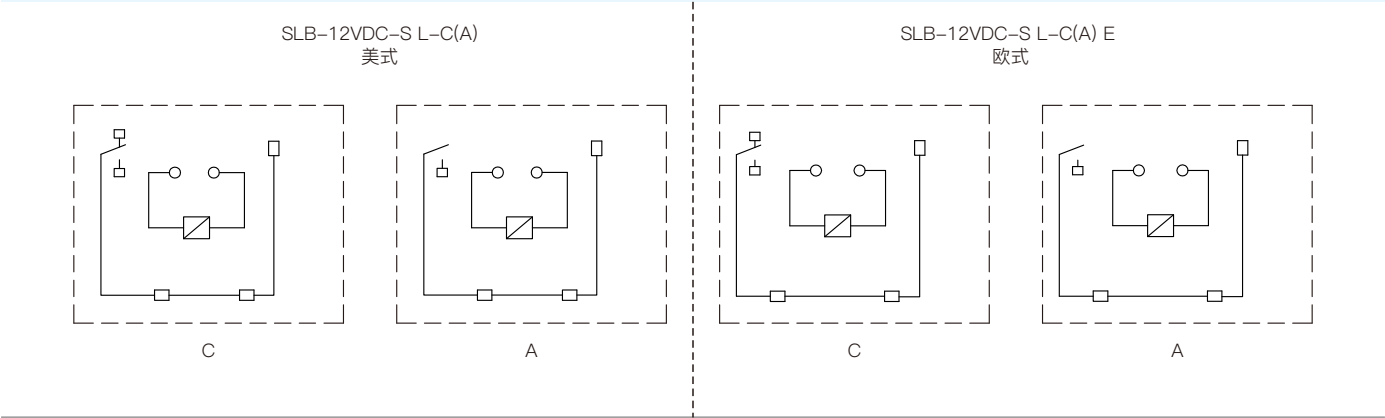
备注: 以上数据均为初始值
Remark: All above data is initial value

线圈参数 / COIL PARAMETERS

常温/At 23℃

		L			H		
功耗(W)	Power consumption(W)	1.8	1.8	1.8	1.6	1.6	1.6
额定电压(VDC)	Nominal voltage(VDC)	6	12	24	6	12	24
线圈电阻(Ω±10%)	Coil resistance(Ω±10%)	20	80	320	22.5	90	360
吸合电压(Max)	Pick-up voltage(Max)	65%额定电压(Nominal voltage)			75%额定电压(Nominal voltage)		
释放电压(Min)	Drop-out voltage(Min)	10%额定电压(Nominal voltage)					
允许最大电压(VDC)	Max allowable overdrive voltage(VDC)	150%额定电压(Nominal voltage)					

线路图(底视图) / WIRING DIAGRAM (BOTTOM VIEW)



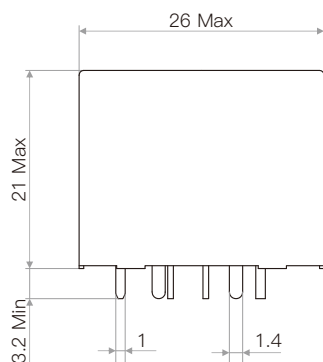
汽车继电器 Automotive Relay

30A/40A

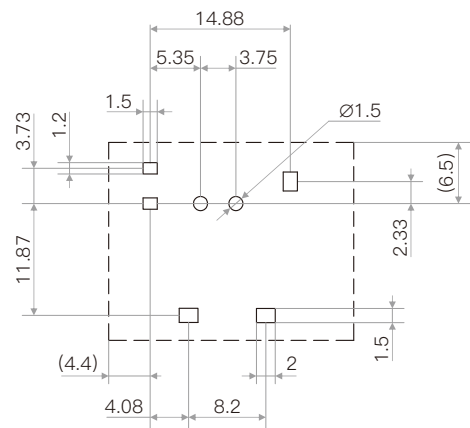
外形图 / OUTLINE DIMENSIONS

单位/Unit(mm)

SLB-12VDC-S L-C(A) 美式

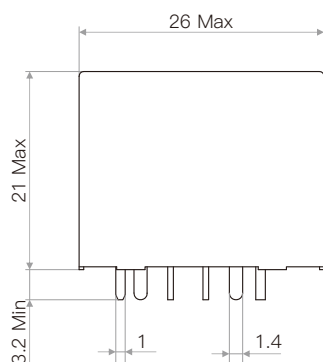


未注公差/Tolerance: ± 0.1

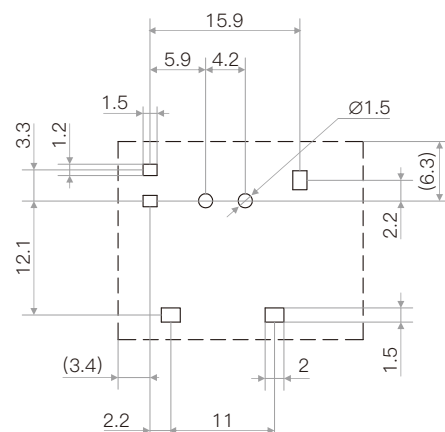


安装孔图(底视图)/Installation hole drawing(Bottom view)

SLB-12VDC-S L-C(A) E 欧式



未注公差/Tolerance: ± 0.1

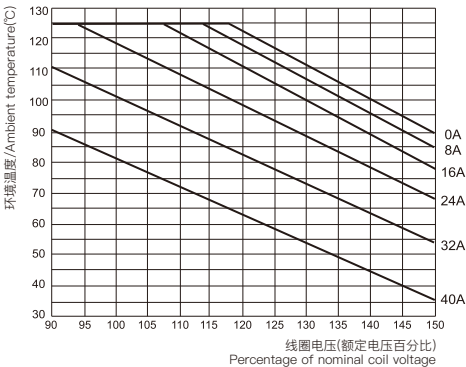


安装孔图(底视图)/Installation hole drawing(Bottom view)

汽车继电器
Automotive Relay

30A/40A

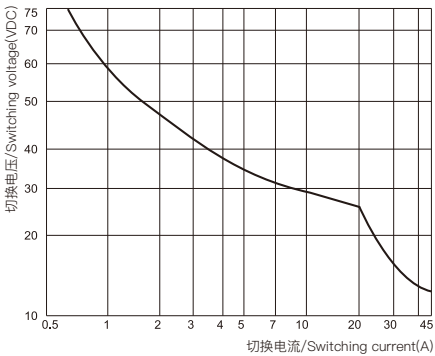
性能曲线图 / CHARACTERISTIC CURVES



线圈连续通电电压范围
Coil operating voltage range

- (1) 线圈最大允许温度为180℃，考虑到电阻法所测量的线圈温升是平均值，推荐在不同使用环境、不同线圈电压、不同负载条件下测量时，线圈温度应小于170℃。
- (2) 当线圈实际工作电压超出曲线规定范围时，请联系松乐并提供详细使用条件。

- (1) The maximum allowable coil temperature is 180℃. Considering the coil temperature rise which is measured by resistance is average value, we recommend the coil temperature (2) should be below 170℃ under the different application ambient, different coil voltage and different load etc.
- If the actual operating coil voltage is out of the specified range, please contact Songle for further details.



允许最大负载范围(23℃)
Load limit curve (at 23℃)

- (1) 本图以常开触点为例，本图电流为阻性。
- (2) 产品按触点参数表进行负载与耐久性试验，当实际使用的负载电压、电流、动作频率、环境温度任一项与触点参数表不同时，请重新进行确认试验。

- (1) This chart takes NO contact, resistive load as example.
- (2) The load and electrical endurance tests are made according to "CONTACT DATA" parameters' table. If actual load voltage, current, operate frequency, or ambient temperature is different from "CONTACT DATA" table, please arrange corresponding tests for confirmation.