

# ST78

## 汽车继电器 Automotive Relays

- 实现冲击负载电流60A、通电、切断35A的小型汽车继电器
- Miniature Automotive Relay with 60A Surge Current and 35A Switching Current.
- 外形尺寸 Outline dimensions: (15.6 × 12.2 × 13.7) mm



RoHS

### 用途举例 Application Examples

- 油泵控制、加热控制、照明/闪光灯/指示灯控制等
- Fuel Pump Control, heating control, Wiper control instrument control etc.

### 型号命名标准 Product Code Structure

基本型号 Type	ST78	-12	H	A	-(XXX)
线圈额定电压 Coil voltage	06, 09, 10, 12, 24,				
线圈功耗、负载电流 Contact rating and coil power	Blank -标准型(800mW) , H-高灵敏度(600mW)				
触点结构 Contact form	Blank- FORM 1C , M- FORM 1A , B- FORM 1B				
封装形式 Category of protection	V-- 非密封型 Flux proof , S-- 密封型 Wash tight				

### 线圈参数 Coil Data(DC)

额定电压 Rated voltage (V)	线圈电阻 Coil resistance (Ω)	吸合电压 Operate voltage	释放电压 Release voltage	最大允许电压 Max release voltage	额定功耗 Rated coil power
		额电压的 % of rated voltage			
6	60	60% Max	10% Min	130%	Approx. 600mW
9	135				
10	167				
12	240				
6	45				Approx. 800mW
9	100				
10	125				
12	180				

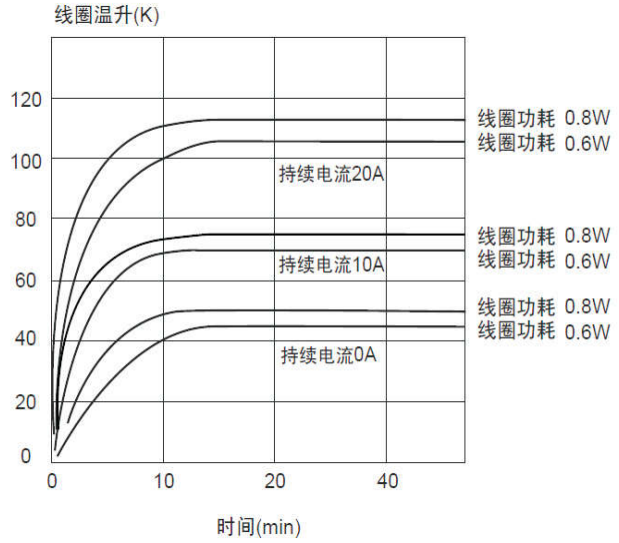
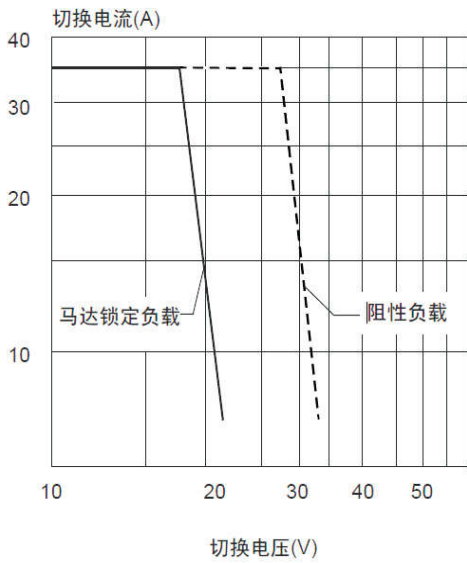
### 触点参数 Contact Data

接触电阻 Contact resistance	100mΩ max ( 1A/6VDC )
额定负载 rated load	A型: 20A14VDC 阻性 B、C型: 15A14VDC阻性
最大连续电流 Max. continuous current	35A/10min.25A/1 Hr.
最大切换电流 Max. switching current	35A
最大冲击电流 Max. inrush current	60A
最大连续电压 Max. switching voltage	30VDC
机械寿命 Mechanical endurance,	1x10 <sup>7</sup> ops
电气寿命 Electrical endurance	1x10 <sup>6</sup> ops

### 性能参数 Characteristics

吸合时间 Operate time	≤10ms	
释放时间 Release time	≤10ms	
绝缘电阻 Insulation resistance	1000MΩ以上 ( 500VDC )	
介质耐压 Initial dielectric strength	线圈触点间 Between contact and coil	AC500V 50/60Hz 1min
	开路触点间 Between open contacts	AC500V 50/60Hz 1min
振动 Vibration resistance	10~55~10Hz (双振幅 1.5mm) (double amplitude 1.5mm)	
冲击 Shock resistance	稳定性 Functional	100m/S <sup>2</sup> ( 10G )
	强度 Destructive	1000m/S <sup>2</sup> ( 100G )
温度范围 Ambient operating temperature	-40°C~+85 °C ;	
湿度范围 Ambient operating humidity	35 ~ 95%RH,+40 °C	
重量 Weight	Approx.6g	

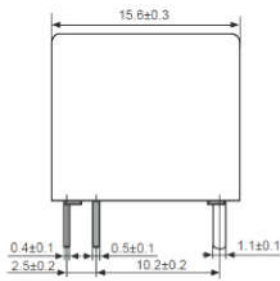
## 性能曲线 Engineering Data



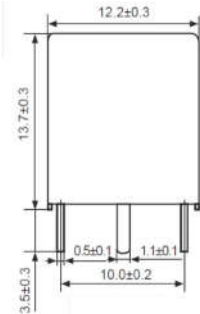
## 外形图、接线图、安装孔尺寸 Outline dimensions、PCB Layout、Wiring Diagram (mm)

### 1) 1C

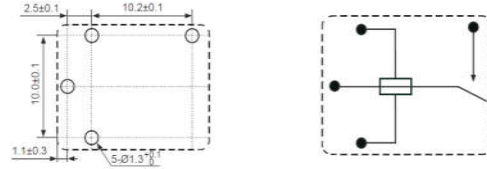
外形图  
Outline dimensions



安装孔 (底部视图)  
PCB Layout (Bottom View)

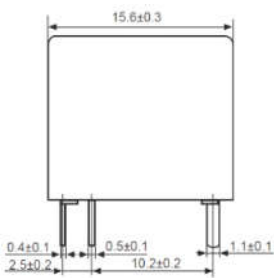


接线图  
Wiring Diagram

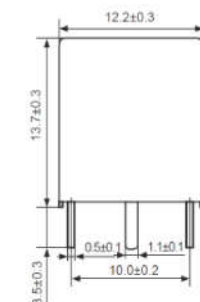


### 2) 1B

外形图  
Outline dimensions



安装孔 (底部视图)  
PCB Layout (Bottom View)



接线图  
Wiring Diagram

