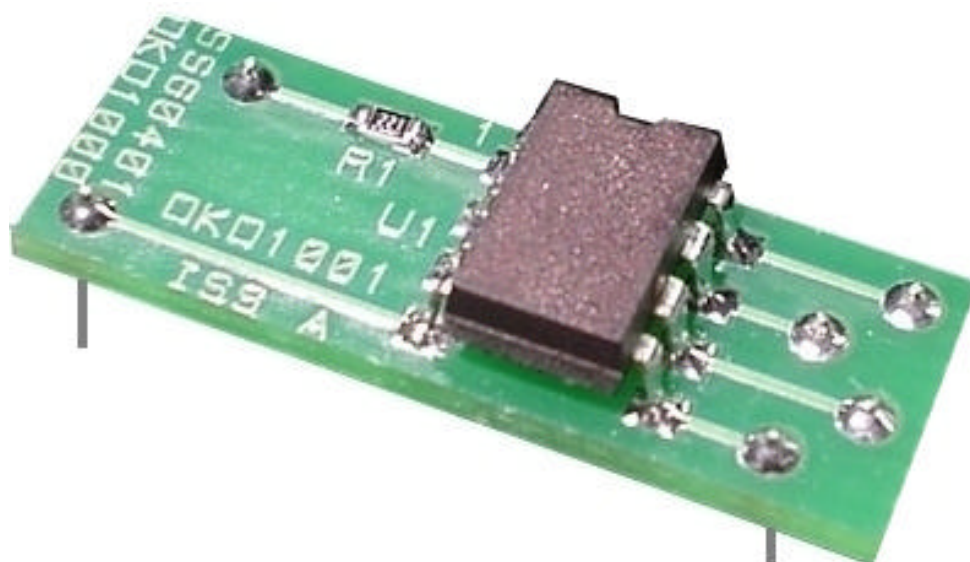


SS60401

Solid-state Relay Module



Description

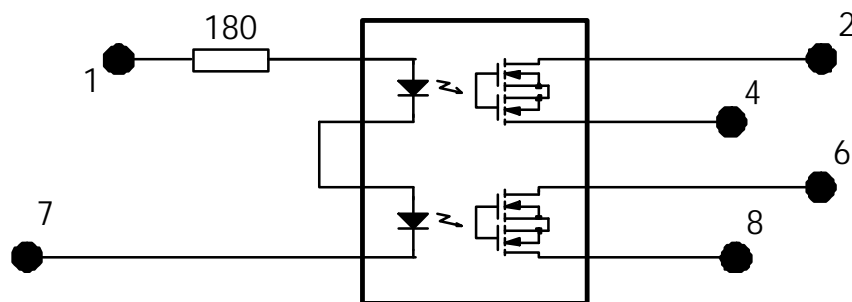
The SS60401 solid-state switch module has been designed specifically to replace the CP Clare electro-mechanical CUPV60401 relay where it is used in low current switching applications.

The SS60401 is designed around the CP Clare PAA110 Dual Pole OptoMOS[®] Relay - a 400V, 150mA, 22ohm, 2-Form-A solid-state device. This device provides high peak load voltage handling capability and improved peak load current handling.

Advantages

- Lower cost
- No large M.O.Q. / M.O.V.
- Environmentally friendly (no mercury)
- Lower power consumption
- High reliability
- Arc free
- No EMI/RFI generation

Pin Configuration



Absolute Maximum Ratings (@ 25°C)

Parameter	Min	Typ.	Max	Units
Input Voltage Maximum	-	-	6	V
Reverse Input Voltage	-	-	6	V
Output Power Dissipation	-	-	500 ¹	mW
Isolation Voltage (Input to Output)	3750	-	-	V _{RMS}
Operational Temperature	-40	-	+85	°C
Storage Temperature	-40	-	+125	°C
Soldering Temperature	-	-	+260	°C

¹ Derate Linearly 6.67mW / °C

Electrical Characteristics

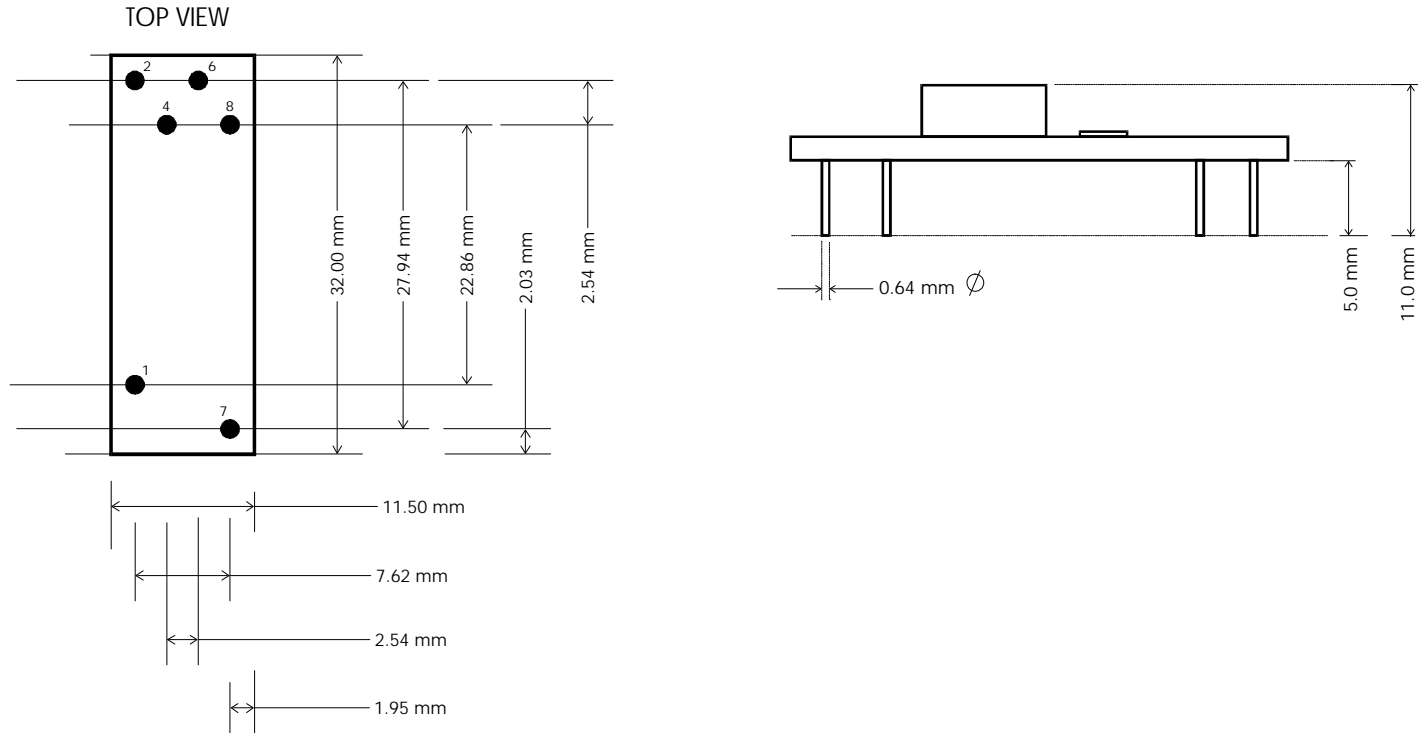
Parameter	Conditions	Symbol	Min	Typ	Max	Units
Output Characteristics @ 25°C						
Load Voltage (Continuous)	-	V _L	-	250	-	V
Load Voltage (Peak)	-	V _L	-	-	400	V
Load Current* (Continuous)	-	I _L	-	-	150	mA
Load Current (Peak)	10mS	I _{LPK}	-	-	400	mA
On-Resistance	I _L =150mA	R _{ON}	-	15	22	Ω
Off-State Leakage Current	V _L =400V	I _{LEAK}	-	-	1	μA
Switching Speeds						
Turn-On	I _F =5mA, V _L =10V	T _{ON}	-	-	1	mS
Turn-Off	I _F =5mA, V _L =10V	T _{OFF}	-	-	0.25	mS
Output Capacitance	50V; f=1MHZ	C _{OUT}	-	25	-	pF
Input Characteristics @ 25°C						
Input Control Voltage	I _L =150mA	V _I	2.7	-	5.5	V
Input Dropout Voltage	-	V _I	0.6	1	-	V
Input Current	V _I =5V	I _F	12	14.5	18	mA
Reverse Input Voltage	-	V _R	-	-	5	V
Reverse Input Current	V _R =5V	I _R	-	-	10	μA
Input to Output Capacitance	-	C _{I/O}	-	3	-	pF
Input to Output Isolation	-	V _{I/O}	3750	-	-	V _{RMS}

* Note: - as both poles are operated simultaneously, load current must be derated so as not to exceed package power dissipation.

Performance Data

For performance data graphs, please refer to CP Clare data sheet DS-PAA110-R3.

Mechanical Data



Ordering Information

DAtEK Part Number	Description
SS60401	CP Clare CUPV60401 solid-state replacement

Price & Delivery*

DAtEK Part Number	1 - 99	100 - 499	500 - 999	1000+
SS60401	P.O.A.			

*small quantities (< 50 pieces) ex-stock, larger quantities 2-3 weeks

Contact Information

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