

SOLID STATE RELAY P/N 5510-70994152800

DIRECT REPLACEMENT FOR SM-C-415280

Description

Solid state relay, direct replacement for SM-C-415280. Designed to replace these obsolete relays in AM-1780A/VRC with superior: MTBF, power dissipation, switching speeds & weight.

Features

- True relay functionality
- Ultra-high MTBF ratings
- Broad operating temperature range
- Typical 75dB crosstalk @ 3kHz
- No EMI/RFI Generation
- Pin to pin and layout compatibility
- Case dimensions compatibility

Applications

AM-1780A/VRC, AN/VIC-1
General Telecommunications / Electronic Switching

Functional Diagrams/Truth Tables/Pin Configurations

	<table border="1"> <thead> <tr> <th rowspan="2"><i>Control Input</i></th> <th colspan="2"><i>Switch Terminals</i></th> </tr> <tr> <th>NC Terminal</th> <th>NO Terminal</th> </tr> </thead> <tbody> <tr> <td>V_{1,2}</td> <td>Connected to COM terminal</td> <td>Not connected</td> </tr> <tr> <td>0v</td> <td>Connected to COM terminal</td> <td>Not connected</td> </tr> <tr> <td>24v</td> <td>Not connected</td> <td>Connected to COM terminal</td> </tr> </tbody> </table>	<i>Control Input</i>	<i>Switch Terminals</i>		NC Terminal	NO Terminal	V _{1,2}	Connected to COM terminal	Not connected	0v	Connected to COM terminal	Not connected	24v	Not connected	Connected to COM terminal	
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Absolute Maximum Ratings

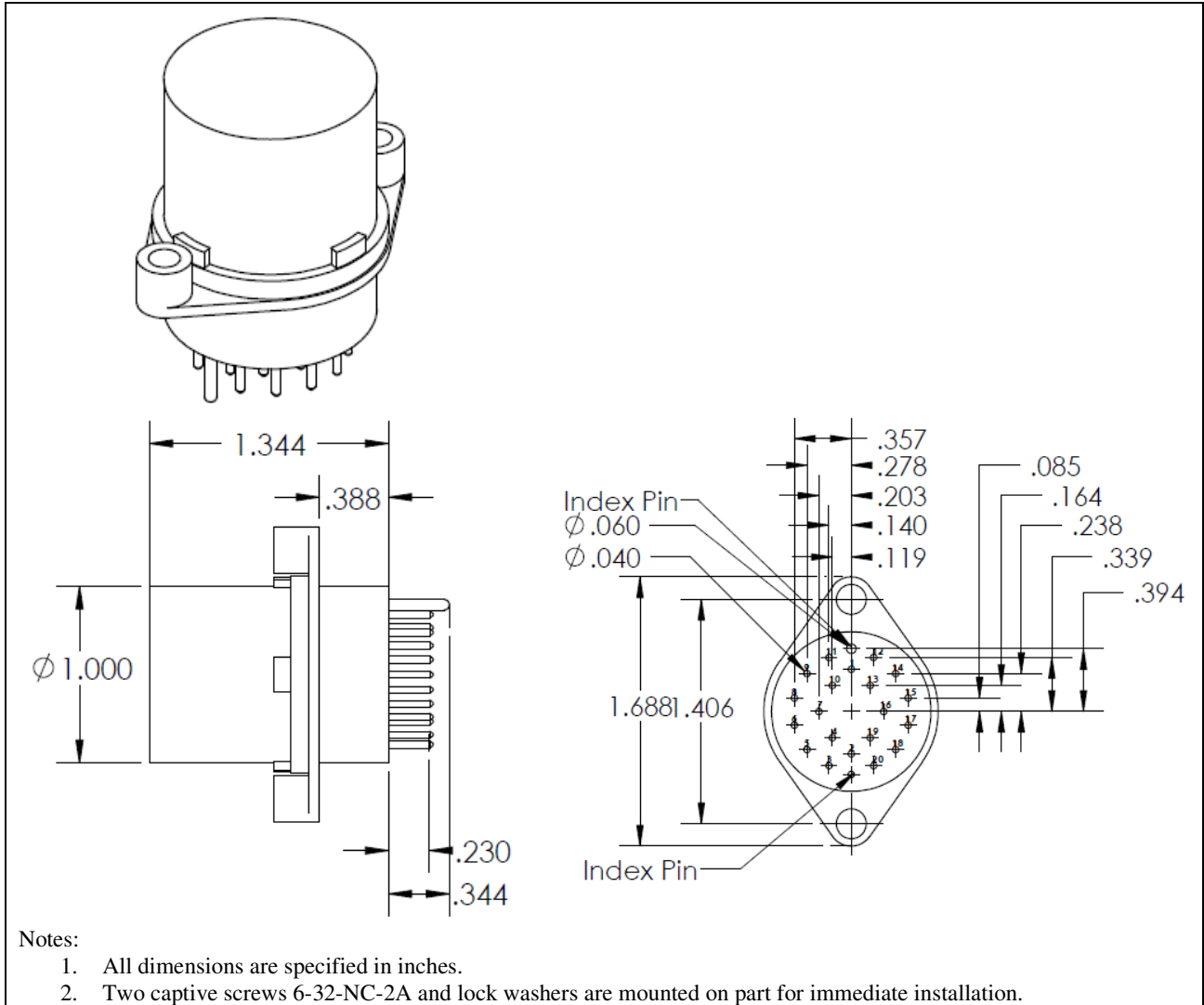
<i>Parameter</i>	<i>Ratings</i>	<i>Units</i>
Blocking Voltage	55	V
Input Voltage	-5 to +35	V
Operational Temperature	-40 to +85	°C
Storage Temperature	-40 to +125	°C

Electrical Characteristics

<i>Parameter</i>	<i>Conditions</i>	<i>Symbol</i>	<i>Min</i>	<i>Typ</i>	<i>Max</i>	<i>Units</i>
Load Current						
Continuous	-	I_L	-	-	0.5	A
Peak	$t < 10 \text{ ms}$	I_{LPK}	-	-	1.2	A
On resistance		R_{ON}	-	-	2	Ω
Leakage Current	$V_L = 55V$	I_{LEAK}			1	μA
Switching Speeds						
Rise Time		t_{RT}	-	120	-	us
Fall Time		t_{FT}	-	225	-	
Channel To Channel Crosstalk	$V_L = 0.22V_{rms}/3kHz$		60	75	-	dB
Input Resistance	$V_{IN} = 26.5V$	R_{IN}	-	1.1	-	k Ω
Pickup Voltage		V_P	-	7.1	-	V
Drop out Voltage		V_D	-	4.8	-	V
MTBF	$V_{IN} = 0V/24V$		10	-	-	Million Cycles

* Electrical characteristics tested at 25 °C.

Mechanical Dimensions



Note:
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