

Dynatech/U-Z Latching SPDT
single-pole, double-throw
SMA Switch DC-18 GHz Model D3-413E3

Latching with SPDT indicator circuitry, self de-energizing circuitry and suppression diodes

Dynatech/U-Z D3-413E3 Specifications:

- **Frequency Range: DC to 18.0 GHz**
- **VSWR, DC-3 GHz: 1.15:1**
- **VSWR, 3-8 GHz: 1.3:1**
- **VSWR, 8-12.4 GHz: 1.4:1**
- **VSWR, 12.4-18 GHz: 1.5:1**
- **Insertion Loss (Max), DC-3 GHz: 0.2 dB**
- **Insertion Loss (Max), 3-8 GHz: 0.3 dB**
- **Insertion Loss (Max), 8-12.4 GHz: 0.4 dB**
- **Insertion Loss (Max), 12.4-18 GHz: 0.5 dB**
- **Isolation (Min), DC-3 GHz: 80 dB**
- **Isolation (Min), 3-8 GHz: 70 dB**
- **Isolation (Min), 8-12.4 GHz: 60 dB**
- **Isolation (Min), 12.4-18 GHz: 60 dB**
- **Switching Time: 15 mS Maximum**
- **Actuating Voltage: 24-30 Vdc (28 Vdc nominal)**
- **Actuating Current: 140 mA Maximum at 28 Vdc and 72°**
- **Operating Mode: Latching with SPDT indicator circuitry, self de-energizing circuitry and suppression diodes**

TYPE D3: SPDT up to 22 GHz



Standard Connectors:

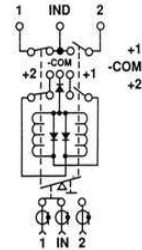
SMA

Specifications:

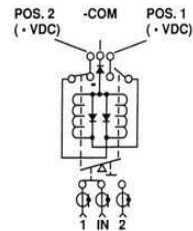
Operating Frequency	DC-3GHz	3-8GHz	8-12.4GHz	12.4-18GHz	18-22GHz
V.S.W.R. (maximum)	1.15:1	1.3:1	1.4:1	1.5:1	1.6:1
Insertion loss (max.)	0.2 dB	0.3 dB	0.4 dB	0.5dB	0.6 dB
Isolation (minimum)	80 dB	70 dB	60 dB	60 dB	60 dB
Actuating voltage	24-30 Vdc (28 Vdc nominal)				
Actuating current	140 milliamps maximum at 28 Vdc and 72°				
Impedance	50 ohms				
Switching Time	15 milliseconds maximum				
R.F. Power	See Power Chart Page 12				
Operating Mode	Failsafe				
Operating Temp.	-35°C to +85°C				
Operating Life	1,000,000 cycles minimum				
Environmental	Designed to meet MIL-E-5400 and MIL-S-3928				
Finish	Switch	Aluminum, electroless nickel plated per MIL-C-26074			
	Connector Contact	Beryllium copper, gold plated per MIL-G-45204			
	Cover	Aluminum, Black			

SCHEMATICS

Latching

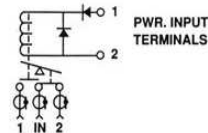


Latching with indicator circuitry, self de-energizing circuitry and suppression diodes.

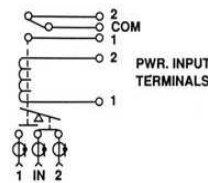


Latching with self de-energizing circuitry and suppression diodes.

Failsafe



Failsafe with suppression diodes



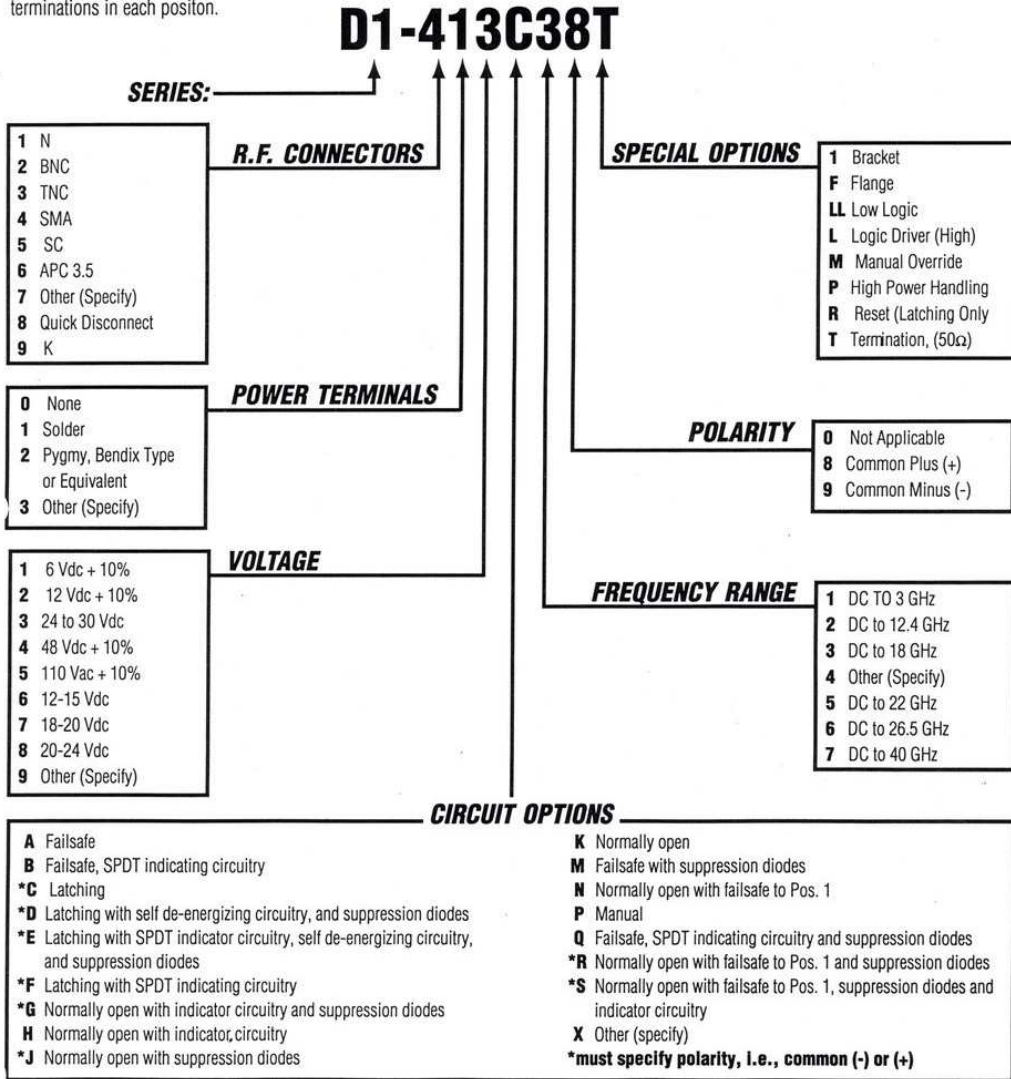
Failsafe, SPDT indicating circuitry

ORDERING INFORMATION

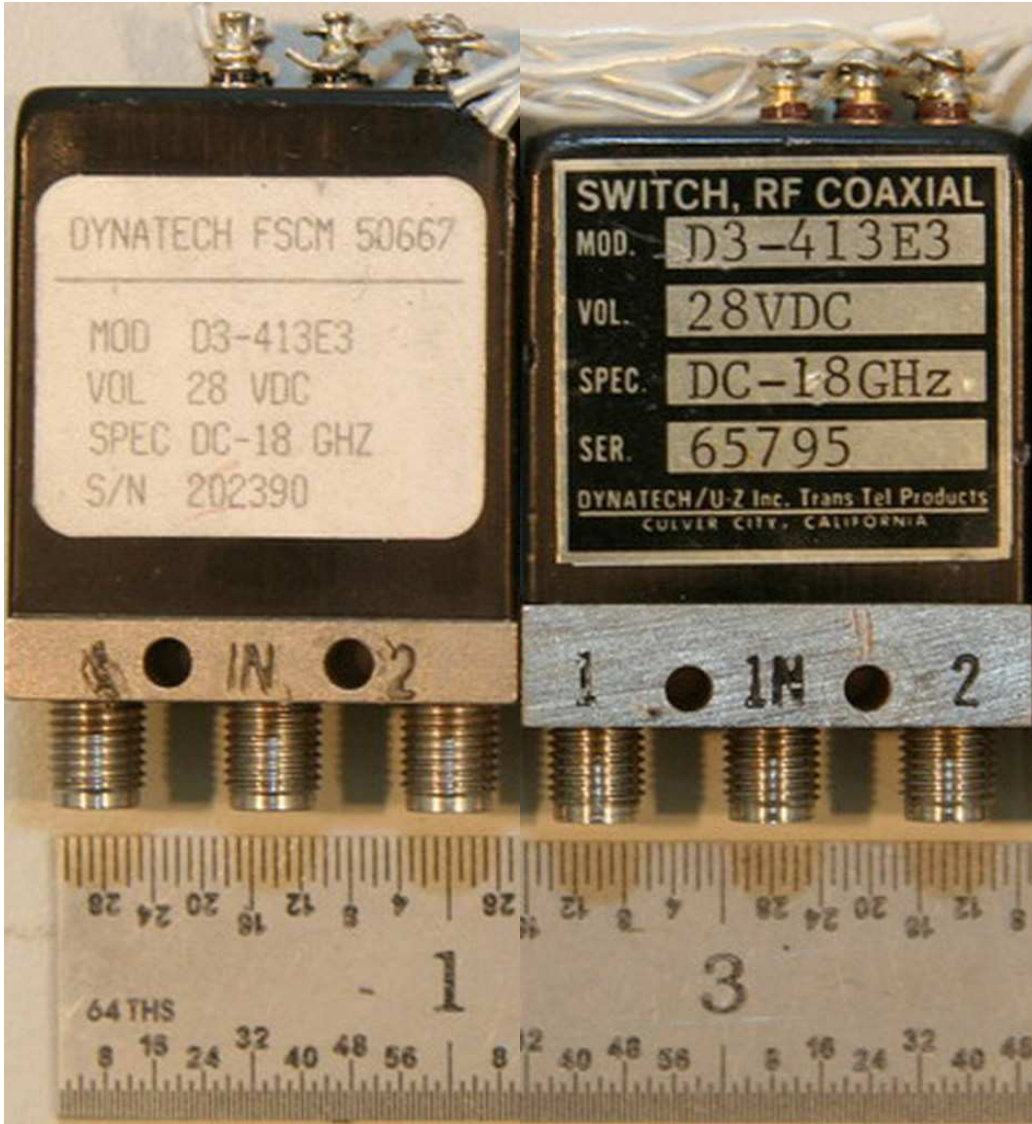
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HOW TO ORDER:

Dynatech Microwave Technology's standard options allow customers to specify switches to their own hardware requirements. For example, D1-413C38T is a SPDT switch with SMA connectors, solder terminals, 28 Vdc, latching, DC to 18 GHz, polarity: common plus and external terminations in each position.



NOTE: Polarity not applicable on switches with logic.



DYNATECH FSCM 50667

MOD D3-413E3
VOL 28 VDC
SPEC DC-18 GHZ
S/N 202390

SWITCH, RF COAXIAL

MOD. D3-413E3
VOL. 28VDC
SPEC. DC-18GHZ
SER. 65795

DYNATECH/U-2 Inc. Trans Tel Products
CULVER CITY, CALIFORNIA

IN 2

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