

# HIGH VOLTAGE 38999

## FOR NEXT GENERATION AIRCRAFT POWER NEEDS

PDS - 311



**High Voltage 38999 (HV38999) is an expansion of the MIL-DTL-38999 series to provide solutions for next generation aircraft power requirements.**

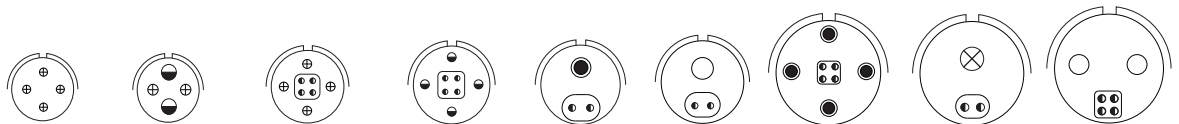
Future power distribution architecture is moving toward higher voltages beyond the capabilities of standard connectors. Through insert optimizations these specialty D38999s can safely carry high voltages and large currents at altitude while remaining partial discharge free to extend connector life.

### FEATURES & BENEFITS:

- Meets/Exceeds applicable MIL-DTL-38999 specifications due to utilization of common design standards
- Available interlock circuitry utilizes last mate, first break sequence
- All MIL-DTL-38999 shell configurations/finishes available including our Dualok high vibration plug
- Utilizes existing AS39029 type silver plated power contacts including options for increased amperage and various termination styles
- Accommodates standard MIL-DTL-38999 accessories

### Partial Discharge Free Operating Voltages of Mated Connectors

ALTITUDE	Test Voltages D/C	Test Voltage A/C
<b>SEA LEVEL</b>	3000V	2300V
<b>20,000 FT</b>	2600V	1800V
<b>30,000 FT</b>	2200V	1500V
<b>50,000 FT</b>	1500V	1200V

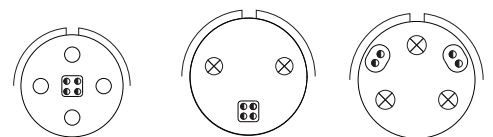


Shell Size & Insert Arrg.:	13-54		15-54		15-58		17-58		17-59		19-59		23-58		23-59		25-56	
Number of Contacts	4	0	2	2	4	4	4	4	1	2	1	2	4	4	1	2	2	4
Contact Size	16	22D	16	12	16	22D	12	22D	8	22D	4	22D	8	22D	0	22D	4	22D



**CONTACT LEGEND** 0 4 8 12 16 22D

All insert arrangements are currently available for non-flight use with slightly reduced performance. Fully compliant components may have extended initial lead time depending on tool status. Please consult factory for more information.



Shell Size & Insert Arrg.:	33-58		37-56		37-57	
Number of Contacts	4	4	2	4	3	4
Contact Size	4	22D	0	22D	0	22D

# HV38999 HOW TO ORDER

## Complete steps 1-8 to create your part number

1.	2.	3.	4.	5.	6.	7.	8.
Connector Type	Shell Style	Service Class	Shell Size - Insert Arrangement	Contact Style	Contact Type	Alternate Position	Modifications
HV	06	RF	13-54		P	A	(3D1)

### 1. Connector Type

<b>HV</b>	High Voltage 38999
<b>HVC</b>	High Voltage Composite 38999

### 4. Shell Size - Insert Arrangement

Shell Size & Insert Arrangements see page 1.

### 5. Contact Style\*\*

<b>OMIT</b>	Crimp /Less Contacts
<b>S</b>	Solder Cup
<b>F</b>	Female Thread Termination
<b>M</b>	Male Thread Termination
<b>B</b>	Busbar

### 8. Modifications\*\*

P3D = 3D Printed, recommended for fit checks and benchtop testing

<b>(3D1)</b>	P3D Metal Clip Insert, Standard Shell
<b>(3D3)</b>	P3D Shell, P3D metal clip insert
<b>(3D5)</b>	P3D Shell, Standard Insert
<b>(3D6)</b>	P3D Shell with printed-in insert

### 2. Shell Style\*\*

<b>00</b>	Wall Mount Receptacle
<b>01</b>	Inline Receptacle
<b>02</b>	Box Mount Receptacle
<b>06</b>	Straight Plug
<b>56</b>	DUALOK Plug
<b>96</b>	Plug with Integral Backshell
<b>07</b>	Jam Nut Receptacle
<b>97</b>	Reduced Flange Jam Nut Receptacle

### 6. Contact Type

Add "G" before contact type designation for gold plated contacts

<b>P</b>	Pin Contacts
<b>S</b>	Socket Contacts
<b>A</b>	Pin, Less Contacts
<b>B</b>	Socket, Less Contacts
<b>H</b>	High Performance Socket
<b>R</b>	RADSOK Socket

### 7. Alternate Position

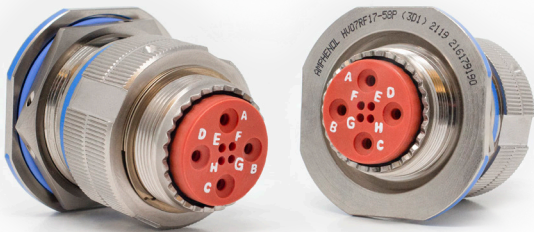
**A, B, C, D, E**  
Omit for normal rotation parts.

### 3. 175°C Service Class

<b>RW</b>	Corrosion resistant olive drab cadmium plated aluminum or composite, 500 hour extended salt spray (Composite - 2000 hour dynamic salt spray)	
<b>DT</b>	Durmalon plated, alternative to cadmium. Corrosion resistant, 500 hour extended salt spray	
<b>DZ</b>	Black Zinc-Nickel alternative to cadmium. 500 hour salt spray, conductive	
<b>RF</b>	Electroless nickel plated aluminum or Composite, 48 hour salt spray (Composite - 2000 hour dynamic salt spray)	
<b>RK</b>	Corrosion resistant stainless steel, firewall, 500 hour salt spray	
<b>RKN</b>	Corrosion resistant stainless steel, non-firewall, 500 hour salt spray	
<b>RL</b>	Nickel plated, corrosion resistant steel, non-firewall, 500 hour salt spray	
<b>RS</b>	Nickel plated, corrosion resistant steel, firewall, 500 hour salt spray	

\*\*Contact factory for additional configurations/customization

Standard Contacts		High Performance Contacts		RADSOK Contacts	
Size	Amps	Size	Amps	Size	Amps
20	7.5	-	-	-	-
16	13	-	-	-	-
12	23	-	-	-	-
8	46	8	65	8	70
4	80	4	110	4	120
0	150	0	220	0	250



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