



Standard Materials and Finishes, Performance Specification

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Material and Finish		
Description	Material	Finish
Contacts	Copper Alloy	Gold (50 microin.) over nickel
Socket Contact Hood (Size 20, 22)	Stainless steel	Passivated
Shell	Aluminum Alloy or stainless steel	See ordering information
Insulators	Thermoset epoxy resin per ASTM D-5948	None
Interfacial Seal	Fluorosilicone	None
Grommet	Fluorosilicone	None
EMI Spring	Copper alloy	Electroless nickel
Contact retention clips	Copper alloy	None
Insert retention clip	Copper alloy	None
Adhesive/Sealant	RTV silicone	None
Hardware	Stainless steel (300 series)	Passivated
O-ring	Fluorosilicone	None

Performance Specifications																																			
Description	Requirement	Procedure																																	
Contact Resistance	SAE AS39029 Table V <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;">Max Wire Size</th> <th style="text-align: center;">Test Current</th> <th style="text-align: center;">Voltage Drop</th> </tr> </thead> <tbody> <tr><td>8</td><td style="text-align: center;">46</td><td style="text-align: center;">26</td></tr> <tr><td>10</td><td style="text-align: center;">33</td><td style="text-align: center;">33</td></tr> <tr><td>12</td><td style="text-align: center;">23</td><td style="text-align: center;">42</td></tr> <tr><td>14</td><td style="text-align: center;">17</td><td style="text-align: center;">40</td></tr> <tr><td>16</td><td style="text-align: center;">13</td><td style="text-align: center;">49</td></tr> <tr><td>20</td><td style="text-align: center;">7.5</td><td style="text-align: center;">55</td></tr> <tr><td>22</td><td style="text-align: center;">5</td><td style="text-align: center;">73</td></tr> <tr><td>24</td><td style="text-align: center;">3</td><td style="text-align: center;">45</td></tr> <tr><td>26</td><td style="text-align: center;">2</td><td style="text-align: center;">52</td></tr> <tr><td>28</td><td style="text-align: center;">1.5</td><td style="text-align: center;">54</td></tr> </tbody> </table>	Max Wire Size	Test Current	Voltage Drop	8	46	26	10	33	33	12	23	42	14	17	40	16	13	49	20	7.5	55	22	5	73	24	3	45	26	2	52	28	1.5	54	EIA-364-06 IEC 60512-2-1 Test current in amperes. Voltage drop in milli-volts. Silver-coated copper wire, +25°C.
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Insulation Resistance	5000 megohms minimum	EIA-364-21 IEC-60512-3-1 500 volts DC ± 50 volts. Test between adjacent contacts and contacts to shell.																																	
Dielectric Withstanding Voltage	No breakdown or flashover	EIA-364-20 IEC-60512-4-1 Sea level AC RMS 50 or 60 Hz. One minute dwell. 1000 volts																																	