## MITSUBISHI ENGINEERING-PLASTICS CORP

ENVIRONMENT & QUALITY ASSURANCE DEPT SHIODOME SUMITOMO-BLDG 25TH FL 1-9-2 HIGASHI-SHINBASHI MINATO-KU, TOKYO 105-0021 Japan



Polycarbonate (PC), pellets, powder, sheets, insulating material

(&4) - Suffix optional except DC and UDC.

(f1) - Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.

Flamin Rating     UL 94       0.50 mm, ALL     HB       1.5 mm, ALL     HB       3.0 mm, ALL     HB       6.0 mm, ALL     HB       6.0 mm, ALL     HB       6.0 mm, ALL     HB       7 Iammability Classification     IEC 60695-11-10, -20       3.0 mm, ALL     HB40       6.0 mm, ALL     HB40       0.50 mm, ALL     HB75       1.5 mm, ALL     HB75       1.5 mm, ALL     HB75       Electrical     Value     Test Method       0.50 mm     PLC 0     1.5 mm       1.5 mm     PLC 3     3.0 mm       0.50 mm     PLC 0     1.5 mm       1.5 mm     PLC 0     1.5 mm       3.0 mm     PLC 0     0.50 mm       1.5 mm     PLC 0     0.0 L 746A       0.50 mm     PLC 0     0.10 T46A	Flammability	Value	Test Method
0.50 mm, ÅLL     HB       1.5 mm, ALL     HB       3.0 mm, ALL     HB       6.0 mm, ALL     HB       6.0 mm, ALL     HB       Flammability Classification     IEC 60695-11-10, -20       3.0 mm, ALL     HB40       6.0 mm, ALL     HB40       6.0 mm, ALL     HB75       Electrical     Value     Test Method       Hotwire Ignition (HWI)     UL 746A       0.50 mm, ALL     HB75       Electrical     Value     Test Method       Hotwire Ignition (HWI)     UL 746A       0.50 mm     PLC 0       1.5 mm     PLC 0       1.5 mm     PLC 0       3.0 mm     PLC 0       3.0 mm     PLC 0       0.50 mm     PLC 0       3.0 mm     PLC 0       3.0 mm     PLC 0       3.0 mm     PLC 0       0.50 mm     PLC 0       0.		value	
1.5 mm, ALL   HB     3.0 mm, ALL   HB     6.0 mm, ALL   HB     Flammability Classification   IEC 60695-11-10, -20     3.0 mm, ALL   HB40     6.0 mm, ALL   HB40     0.50 mm, ALL   HB75     1.5 mm   PLC 0     1.5 mm   PLC 3     6.0 mm   PLC 0     1.5 mm   PLC 0     1.5 mm   PLC 0     1.5 mm   PLC 0     3.0 mm   PLC 0     0.50 mm   PLC 2     0.50 mm   PLC 2     0.50 mm   PLC 2     0.50 mm   L0 E+7 ohms-cm		ЦВ	0L 94
3.0 mm, ALL HB   6.0 mm, ALL HB   Flammability Classification HEC 60695-11-10, -20   3.0 mm, ALL HB40   6.0 mm, ALL HB40   0.50 mm, ALL HB75   1.5 mm, ALL HB75   Electrical   Value   Test Method   Hot-wire Ignition (HWI) UL 746A   0.50 mm PLC 0   1.5 mm PLC 3   3.0 mm PLC 3   6.0 mm PLC 0   1.5 mm PLC 0   1.5 mm PLC 0   1.5 mm PLC 0   0.50 mm PLC 0   1.5 mm PLC 0   1.5 mm PLC 0   0.50 mm PLC 0   1.5 mm PLC 0   1.5 mm PLC 0   0.50 mm PLC 0   0.50 mm PLC 0   0.50 mm PLC 0   1.5 mm PLC 0   0.50 mm PLC 0   1.5 mm PLC 0   0.50 mm PLC 0   0.50 mm PLC 0   0.50 mm PLC 0   0.50 mm Q0 W/mm   High Voltage Arc Tracking Rate (HVTR) VL 0   Volume Resistivity 1			
6.0 mm, ALL     HB       Flammability Classification     IEC 60695-11-10, -20       3.0 mm, ALL     HB40       6.0 mm, ALL     HB40       0.50 mm, ALL     HB75       1.5 mm, ALL     HB75       Electrical     Value       Hot-wire Ignition (HWI)     UL 746A       0.50 mm     PLC 0       1.5 mm     PLC 3       3.0 mm     PLC 3       6.0 mm     PLC 0       1.5 mm     PLC 0       0.50 mm     PLC 0       0.6 mm     PLC 0       0.6 mm     PLC 0       Volume Resistivity     1.0E+7 ohms-cm       Volume Resistivity     1.0E+7 ohms-cm       Volume Resistivity     1.0E+7 ohms-cm       Volume Resistivity     1.0E+7 ohms-cm       RTI Elec <td>,</td> <td></td> <td></td>	,		
Flammability Classification     IEC 60695-11-10, -20       3.0 mm, ALL     HB40       6.0 mm, ALL     HB40       0.50 mm, ALL     HB75       1.5 mm, ALL     HB75       1.5 mm, ALL     HB75       Electrical     Value     Test Method       Hot-wire Ignition (HWI)     UL 746A     UL 746A       0.50 mm     PLC 0     1.5 mm       3.0 mm     PLC 3			
3.0 mm, ÅLL   HB40     6.0 mm, ALL   HB40     0.50 mm, ALL   HB75     1.5 mm, ALL   HB75     Electrical     Value     Test Method     Hot-wire Ignition (HWI)   UL 746A     0.50 mm   PLC 0     1.5 mm   PLC 3     3.0 mm   PLC 3     6.0 mm   PLC 0     High Amp Arc Ignition (HAI)   UL 746A     0.50 mm   PLC 0     1.5 mm   PLC 0     3.0 mm   PLC 0     6.0 mm   PLC 0     1.5 mm   PLC 0     3.0 mm   PLC 0     0.50 mm   Q1KV/mm     10ielectric Strength   20kV/mm     High Voitage Arc Tracking Rate (HVTR)   PLC 0     Volume Resistivity   1.0E+7 ohms-cm     Volume Resistivity   1.0E+7 ohms-cm     UL	· · · · · · · · · · · · · · · · · · ·	ПВ	
6.0 mm, ALL   HB40     0.50 mm, ALL   HB75     1.5 mm, ALL   HB75     1.5 mm, ALL   HB75     Lectrical     Hot-wire Ignition (HWI)   UL 746A     0.50 mm   PLC 0     1.5 mm   PLC 3     3.0 mm   PLC 3     6.0 mm   PLC 0     High Amp Arc Ignition (HAI)   UL 746A     0.50 mm   PLC 0     1.5 mm   PLC 0     3.0 mm   PLC 0     6.0 mm   PLC 0     1.5 mm   PLC 0     3.0 mm   PLC 0     0.50 mm   PLC 0     1.5 mm   PLC 0     3.0 mm   PLC 0     0.15 mm   PLC 0     0.0 mm   PLC 0     0.0 mm   PLC 0     Ul 746A   Volume Resistivity     1.0 E+7 ohms-cm   ASTM D149     High Voltage Arc Tracking Rate (HVTR)   PLC 0   UL 746A     Volume Resistivity   1.0 E+7 ohms-cm   ASTM D257     Volume Resistivity   1.0 E+7 ohms-cm   ASTM D495     Thermal   Value   Tes	•	HB40	IEC 60695-11-10, -20
0.50 mm, ALL     HB75       1.5 mm, ALL     HB75       Electrical     Value     Test Method       Hot-wire Ignition (HWI)     UL 746A     UL 746A       0.50 mm     PLC 0     1.5 mm     3.0 mm       3.0 mm     PLC 3			
1.5 mm, ALL   HB75     Electrical   Value   Test Method     Hot-wire Ignition (HWI)   UL 746A   UL 746A     0.50 mm   PLC 0   1.5 mm     1.5 mm   PLC 3   3.0 mm     6.0 mm   PLC 0   1.5 mm     6.0 mm   PLC 0   1.5 mm     1.5 mm   PLC 0   1.5 mm     6.0 mm   PLC 0   1.5 mm     0.50 mm   PLC 0   UL 746A     Dielectric Strength   20 kV/mm   ASTM D149     High Voltage Arc Tracking Rate (HVTR)   PLC 0   UL 746A     Volume Resistivity   1.0E+7 ohms-cm   IEC 60093     Arc Resistance   PLC 6   ASTM D257     Volume Resistivity   1.0E+7 ohms-cm			
ElectricalValueTest MethodHot-wire Ignition (HWI)UL 746A0.50 mmPLC 01.5 mmPLC 33.0 mmPLC 36.0 mmPLC 0High Amp Arc Ignition (HAI)UL 746A0.50 mmPLC 01.5 mmPLC 03.0 mmPLC 01.5 mmPLC 03.0 mmPLC 00.50 mmPLC 01.5 mmPLC 03.0 mmPLC 00.50 mmPLC 01.5 mmPLC 01.5 mmPLC 02.0 mmPLC 01.0 mmPLC 02.0 mmPLC 01.0 expressionASTM D149High Voltage Arc Tracking Rate (HVTR)PLC 0Volume Resistivity1.0E+7 ohms cm4 cr ResistancePLC 6AsTM D257Volume Resistivity1.0E+7 ohms cm1.0 Er 7 ohms cmIEC 60093Arc ResistancePLC 6ASTM D495ThermalValueRTI ElecUL 746B0.50 mm80.0 °C1.5 mm125 °C3.0 mm125 °C			
Hot-wire Ignition (HWI)     UL 746A       0.50 mm     PLC 0       1.5 mm     PLC 3       3.0 mm     PLC 3       6.0 mm     PLC 0       High Amp Arc Ignition (HAI)     UL 746A       0.50 mm     PLC 0       1.5 mm     PLC 0       1.5 mm     PLC 0       3.0 mm     PLC 0       0.50 mm     PLC 0       1.5 mm     PLC 0       3.0 mm     PLC 0       6.0 mm     PLC 0       Comparative Tracking Index (CTI)     PLC 2       Dielectric Strength     20 kV/mm       High Voltage Arc Tracking Rate (HVTR)     PLC 0       Volume Resistivity     1.0E+7 ohms·cm       Volume Resistivity     1.0E+7 ohms·cm       Arc Resistance     PLC 6       ASTM D495       Thermal     Value       RTI Elec     UL 746B       0.50 mm     80.0 °C       1.5 mm     125 °C       3.0 mm     125 °C			Test Methed
0.50 mm     PLC 0       1.5 mm     PLC 3       3.0 mm     PLC 3       6.0 mm     PLC 0       High Amp Arc Ignition (HAI)     UL 746A       0.50 mm     PLC 0       1.5 mm     PLC 0       3.0 mm     PLC 0       3.0 mm     PLC 0       3.0 mm     PLC 0       3.0 mm     PLC 0       6.0 mm     PLC 0       6.0 mm     PLC 0       Comparative Tracking Index (CTI)     PLC 2       Dielectric Strength     20 kV/mm       High Voltage Arc Tracking Rate (HVTR)     PLC 0       Volume Resistivity     1.0E+7 ohms-cm       Volume Resistivity     1.0E+7 ohms-cm       Volume Resistivity     1.0E+7 ohms-cm       Volume Resistivity     1.0E+7 ohms-cm       Thermal     Value     Test Method       RTI Elec     UL 746B       0.50 mm     80.0 °C       1.5 mm     125 °C       3.0 mm     125 °C		Value	
1.5 mm   PLC 3     3.0 mm   PLC 3     6.0 mm   PLC 0     High Amp Arc Ignition (HAI)   UL 746A     0.50 mm   PLC 0     1.5 mm   PLC 0     3.0 mm   PLC 0     6.0 mm   PLC 0     6.0 mm   PLC 0     Comparative Tracking Index (CTI)   PLC 2   UL 746A     Dielectric Strength   20 kV/mm   ASTM D149     High Voltage Arc Tracking Rate (HVTR)   PLC 0   UL 746A     Volume Resistivity   1.0E+7 ohms·cm   ASTM D257     Volume Resistivity   1.0E+7 ohms·cm   IEC 60093     Arc Resistance   PLC 6   ASTM D495     Themal   Value   Test Method     RTI Elec   UL 746B   0.50 mm     0.50 mm   80.0 °C   1.5 mm     1.5 mm   125 °C   3.0 mm			UL 746A
3.0 mm   PLC 3     6.0 mm   PLC 0     High Amp Arc Ignition (HAI)   UL 746A     0.50 mm   PLC 0     1.5 mm   PLC 0     3.0 mm   PLC 0     6.0 mm   PLC 0     6.0 mm   PLC 0     Comparative Tracking Index (CTI)   PLC 2   UL 746A     Dielectric Strength   20 kV/mm   ASTM D149     High Voltage Arc Tracking Rate (HVTR)   PLC 0   UL 746A     Volume Resistivity   1.0E+7 ohms·cm   ASTM D257     Volume Resistivity   1.0E+7 ohms·cm   IEC 60093     Arc Resistance   PLC 6   ASTM D495     Thermal   Value   Test Method     RTI Elec   UL 746B   UL 746B     0.50 mm   80.0 °C   1.5 mm     1.5 mm   125 °C   3.0 mm			
6.0 mm     PLC 0       High Amp Arc Ignition (HAI)     UL 746A       0.50 mm     PLC 0       1.5 mm     PLC 0       3.0 mm     PLC 0       6.0 mm     PLC 0       Comparative Tracking Index (CTI)     PLC 2       Dielectric Strength     20 kV/mm       High Voltage Arc Tracking Rate (HVTR)     PLC 0       Volume Resistivity     1.0E+7 ohms cm       Volume Resistivity     1.0E+7 ohms cm       Arc Resistance     PLC 6       Arc Resistance     UL 746B       0.50 mm     UL 746B       0.50 mm     1.0E+7 ohms cm       IEC 60093     Arc Resistance       PLC 6     ASTM D495       Thermal     Value       RTI Elec     UL 746B       0.50 mm     80.0 °C       1.5 mm     125 °C       3.0 mm     125 °C			
High Amp Arc Ignition (HAI)     UL 746A       0.50 mm     PLC 0       1.5 mm     PLC 0       3.0 mm     PLC 0       6.0 mm     PLC 0       Comparative Tracking Index (CTI)     PLC 2       Dielectric Strength     20 kV/mm       High Voltage Arc Tracking Rate (HVTR)     PLC 0       Volume Resistivity     1.0E+7 ohms cm       Volume Resistivity     1.0E+7 ohms cm       Arc Resistance     PLC 6       Thermal     Value       RTI Elec     UL 746B       0.50 mm     80.0 °C       1.5 mm     125 °C       3.0 mm     125 °C			
0.50 mm     PLC 0       1.5 mm     PLC 0       3.0 mm     PLC 0       6.0 mm     PLC 0       Comparative Tracking Index (CTI)     PLC 2     UL 746A       Dielectric Strength     20 kV/mm     ASTM D149       High Voltage Arc Tracking Rate (HVTR)     PLC 0     UL 746A       Volume Resistivity     1.0E+7 ohms·cm     ASTM D257       Volume Resistivity     1.0E+7 ohms·cm     IEC 60093       Arc Resistance     PLC 6     ASTM D495       Thermal     Value     Test Method       0.50 mm     80.0 °C     1.5 mm       1.5 mm     125 °C     3.0 mm		PLC 0	
1.5 mm   PLC 0     3.0 mm   PLC 0     6.0 mm   PLC 0     Comparative Tracking Index (CTI)   PLC 2   UL 746A     Dielectric Strength   20 kV/mm   ASTM D149     High Voltage Arc Tracking Rate (HVTR)   PLC 0   UL 746A     Volume Resistivity   1.0E+7 ohms·cm   ASTM D257     Volume Resistivity   1.0E+7 ohms·cm   IEC 60093     Arc Resistance   PLC 6   ASTM D495     Thermal   Value   Test Method     0.50 mm   80.0 °C   UL 746B     0.50 mm   125 °C   3.0 mm			UL 746A
3.0 mm   PLC 0     6.0 mm   PLC 0     Comparative Tracking Index (CTI)   PLC 2   UL 746A     Dielectric Strength   20 kV/mm   ASTM D149     High Voltage Arc Tracking Rate (HVTR)   PLC 0   UL 746A     Volume Resistivity   1.0E+7 ohms cm   ASTM D257     Volume Resistivity   1.0E+7 ohms cm   IEC 60093     Arc Resistance   PLC 6   ASTM D495     Thermal   Value   Test Method     RTI Elec   UL 746B   UL 746B     0.50 mm   80.0 °C   UL 746B     1.5 mm   125 °C   3.0 mm			
6.0 mmPLC 0Comparative Tracking Index (CTI)PLC 2UL 746ADielectric Strength20 kV/mmASTM D149High Voltage Arc Tracking Rate (HVTR)PLC 0UL 746AVolume Resistivity1.0E+7 ohms·cmASTM D257Volume Resistivity1.0E+7 ohms·cmIEC 60093Arc ResistancePLC 6ASTM D495ThermalValueTest MethodRTI ElecUL 746B0.50 mm80.0 °C1.5 mm125 °C3.0 mm125 °C			
Comparative Tracking Index (CTI)PLC 2UL 746ADielectric Strength20 kV/mmASTM D149High Voltage Arc Tracking Rate (HVTR)PLC 0UL 746AVolume Resistivity1.0E+7 ohms·cmASTM D257Volume Resistivity1.0E+7 ohms·cmIEC 60093Arc ResistancePLC 6ASTM D495ThermalValueTest MethodRTI ElecUL 746B0.50 mm80.0 °C1.5 mm125 °C3.0 mm125 °C			
Dielectric Strength20 kV/mmASTM D149High Voltage Arc Tracking Rate (HVTR)PLC 0UL 746AVolume Resistivity1.0E+7 ohms·cmASTM D257Volume Resistivity1.0E+7 ohms·cmIEC 60093Arc ResistancePLC 6ASTM D495ThermalValueTest MethodRTI ElecUL 746B0.50 mm80.0 °C1.5 mm125 °C3.0 mm125 °C			
High Voltage Arc Tracking Rate (HVTR)     PLC 0     UL 746A       Volume Resistivity     1.0E+7 ohms·cm     ASTM D257       Volume Resistivity     1.0E+7 ohms·cm     IEC 60093       Arc Resistance     PLC 6     ASTM D495       Thermal     Value     Test Method       0.50 mm     80.0 °C     1.25 °C       3.0 mm     125 °C     1.25 °C			
Volume Resistivity     1.0E+7 ohms·cm     ASTM D257       Volume Resistivity     1.0E+7 ohms·cm     IEC 60093       Arc Resistance     PLC 6     ASTM D495       Thermal     Value     Test Method       RTI Elec     UL 746B       0.50 mm     80.0 °C       1.5 mm     125 °C       3.0 mm     125 °C	v		
Volume Resistivity     1.0E+7 ohms cm     IEC 60093       Arc Resistance     PLC 6     ASTM D495       Thermal     Value     Test Method       RTI Elec     UL 746B       0.50 mm     80.0 °C       1.5 mm     125 °C       3.0 mm     125 °C		PLC 0	UL 746A
Arc ResistancePLC 6ASTM D495ThermalValueTest MethodRTI ElecUL 746B0.50 mm80.0 °C1.5 mm125 °C3.0 mm125 °C	Volume Resistivity	1.0E+7 ohms · cm	ASTM D257
Thermal     Value     Test Method       RTI Elec     UL 746B       0.50 mm     80.0 °C       1.5 mm     125 °C       3.0 mm     125 °C	Volume Resistivity	1.0E+7 ohms∙cm	IEC 60093
RTI Elec     UL 746B       0.50 mm     80.0 °C       1.5 mm     125 °C       3.0 mm     125 °C	Arc Resistance	PLC 6	ASTM D495
0.50 mm 80.0 °C   1.5 mm 125 °C   3.0 mm 125 °C	Thermal	Value	Test Method
1.5 mm 125 °C   3.0 mm 125 °C	RTI Elec		UL 746B
3.0 mm 125 °C	0.50 mm	80.0 °C	
	1.5 mm	125 °C	
6.0 mm 125 °C	3.0 mm	125 °C	
	6.0 mm	125 °C	

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	Last Revised: 7/15/2020 4:42:38

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## Component - Plastics File Number: E41179

Thermal	Value	Test Method
RTI Imp		UL 746B
0.50 mm	80.0 °C	
1.5 mm	115 °C	
3.0 mm	115 °C	
6.0 mm	115 °C	
RTI Str		UL 746B
0.50 mm	80.0 °C	
1.5 mm	125 °C	
3.0 mm	125 °C	
6.0 mm	125 °C	
Physical	Value	Test Method
Dimensional Change	0.0%	ASTM D1042
Dimensional Change	0.0 %	ISO 2796
Outdoor Suitability	f1	UL 746C

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