

PERFORMANCE DATA

CTS Chip Resistor Arrays
 CTS Part Number 742083103J
 BL# 19817-L2

Updated 7/26/95
 DLP

TEST DESCRIPTION	TEST STANDARD	PERCENT VALUE CHANGE			#Tested	#Failed	
		MIN	MAX	ABS AVG			
Thermal Shock	MIL-R-83401E	-0.218	0.116	0.058	50	0	
Power Conditioning	MIL-R-83401E	-0.037	0.061	0.014	50	0	
Temperature Coefficient	MIL-R-83401E	-49ppm	-32ppm	39ppm	10	0	
Low Temp Operation	MIL-R-83401E	-0.010	0.005	0.005	10	0	
Short Time Overload	MIL-R-84401E	-0.018	0.033	0.008	10	0	
Dielectric Withstand	MIL-R-83401E	Pass	Pass	Pass	10	0	
Insulation Resistance	MIL-R-83401E	Pass	Pass	Pass	10	0	
Resistance to Solder Heat	Immerse in vapor phase of boiling FC-70 Flourinert for 30sec @219C	-0.025	0.011	0.006	10	0	
Moisture Resistance	MIL-R-83401E	-0.001	0.185	0.015	10	0	
Shock	MIL-R-83401E	-0.006	0.002	0.003	10	0	
Load Life	MIL-R-83401E	250hrs	-0.013	0.060	0.042	10	0
100% rated power @70c		500hrs	-0.018	0.070	0.052	10	0
		1000hrs	0.002	0.099	0.075	10	0
		2000hrs	-0.009	0.108	0.085	10	0
High Temp Exposure	MIL-R-83401E	-0.037	0.137	0.094	10	0	
Low Temp Storage	MIL-R-83401E	-0.035	0.128	0.016	10	0	
Load Humidity		250hrs	0.007	0.063	0.046	10	0
70C 90% RH 250hrs		500hrs	0.025	0.070	0.052	10	0
10% rated load 500hrs		1000hrs	0.042	0.092	0.071	10	0
Temp Cycle Life		500hrs	0.073	0.108	0.089	10	0
1/2 hr. @ -40C		1000hrs	0.084	0.120	0.106	10	0
1/2 hr. @ +125C							
Power Temp Cycle Life		500hrs	0.086	0.125	0.106	10	0
1/2 hr. @ -40C		1000hrs	0.109	0.151	0.130	10	0
1/2 hr. @ +125C							
10% load 5min on 5min off							

PERFORMANCE DATA

CTS Chip Resistor Arrays
 CTS Part Number 743083101J
 BL# 19817-L3

Updated 7/26/95
 DLP

TEST DESCRIPTION	TEST STANDARD	PERCENT VALUE CHANGE			#Tested	#Failed	
		MIN	MAX	ABS AVG			
Thermal Shock ****	MIL-R-83401E	-0.191	0.019	0.012	47	0	
Power Conditioning	MIL-R-83401E	-0.022	0.239	0.015	47	0	
Temperature Coefficient	MIL-R-83401E	-82ppm	59ppm	49.5ppm	10	0	
Low Temp Operation	MIL-R-83401E	-0.023	-0.003	0.011	10	0	
Short Time Overload	MIL-R-84401E	-0.010	0.003	0.004	10	0	
Dielectric Withstand	MIL-R-83401E	Pass	Pass	Pass	10	0	
Insulation Resistance	MIL-R-83401E	Pass	Pass	Pass	10	0	
Resistance to Solder Heat	Immerse in vapor phase of boiling FC-70 Flourinert for 30sec @219C	-0.010	0.304	0.013	10	0	
Moisture Resistance	MIL-R-83401E	-0.018	-0.004	0.010	10	0	
Shock	MIL-R-83401E	-0.005	0.006	0.003	10	0	
Load Life	MIL-R-83401E	250hrs	-0.009	0.014	0.005	10	0
100% rated power @70c		500hrs	-0.010	0.017	0.007	10	0
		1000hrs	-0.005	0.022	0.007	10	0
		2000hrs	-0.013	0.003	0.005	10	0
High Temp Exposure	MIL-R-83401E	0.003	0.018	0.013	10	0	
Low Temp Storage	MIL-R-83401E	-0.018	-0.006	0.011	10	0	
Load Humidity		250hrs	-0.009	0.007	0.003	10	0
70C 90% RH 250hrs		500hrs	-0.015	0.007	0.006	10	0
10% rated load 500hrs		1000hrs	-0.010	0.008	0.004	10	0
Temp Cycle Life		500hrs	-0.005	0.012	0.004	10	0
1/2 hr. @ -40C		1000hrs	-0.005	0.010	0.004	10	0
1/2 hr. @ +125C							
Power Temp Cycle Life		500hrs	-0.001	0.186	0.013	10	0
1/2 hr. @ -40C		1000hrs	-0.008	0.015	0.005	10	0
1/2 hr. @ +125C							
10% load 5min on 5min off							

**** Note - Three units were damaged/scratched during the thermal shock testing

PERFORMANCE DATA

CTS Chip Resistor Arrays
 CTS Part Number 743083224J
 BL# 19811-L1

Updated 7/26/95
 DLP

TEST DESCRIPTION	TEST STANDARD	PERCENT VALUE CHANGE			#Tested	#Failed	
		MIN	MAX	ABS AVG			
Thermal Shock	MIL-R-83401E	-0.126	0.251	0.062	50	0	
Power Conditioning	MIL-R-83401E	-0.310	0.118	0.047	50	0	
Temperature Coefficient	MIL-R-83401E	-56ppm	-8ppm	35ppm	10	0	
Low Temp Operation	MIL-R-83401E	-0.039	0.156	0.069	10	0	
Short Time Overload	MIL-R-84401E	-0.190	0.009	0.089	10	0	
Dielectric Withstand	MIL-R-83401E	Pass	Pass	Pass	10	0	
Insulation Resistance	MIL-R-83401E	Pass	Pass	Pass	10	0	
Resistance to Solder Heat	Immerse in vapor phase of boiling FC-70 Flourinert for 30sec @219C	-0.157	0.116	0.053	10	0	
Moisture Resistance	MIL-R-83401E	-0.401	0.376	0.082	10	0	
Shock	MIL-R-83401E	-0.134	0.093	0.017	10	0	
Load Life	MIL-R-83401E	250hrs	-0.170	0.025	0.052	10	0
100% rated power @70c		500hrs	-0.118	0.109	0.044	10	0
		1000hrs	-0.156	0.043	0.051	10	0
		2000hrs	-0.158	0.052	0.053	10	0
High Temp Exposure	MIL-R-83401E	0.009	0.242	0.116	10	0	
Low Temp Storage	MIL-R-83401E	-0.221	-0.007	0.058	10	0	
Load Humidity		250hrs	0.014	0.096	0.055	10	0
70C 90% RH 250hrs		500hrs	-0.065	0.201	0.135	10	0
10% rated load 500hrs		1000hrs	0.032	0.136	0.068	10	0
Temp Cycle Life		500hrs	-0.075	0.232	0.083	10	0
1/2 hr. @ -40C		1000hrs	-0.098	0.191	0.084	10	0
1/2 hr. @ +125C							
Power Temp Cycle Life		500hrs	-0.036	0.133	0.072	10	0
1/2 hr. @ -40C		1000hrs	-0.048	0.132	0.088	10	0
1/2 hr. @ +125C							
10% load 5min on 5min off							

PERFORMANCE DATA

CTS Chip Resistor Arrays
 CTS Part Number 744083101J
 BL# 19811-L2

Updated 7/26/95
 DLP

TEST DESCRIPTION	TEST STANDARD	PERCENT VALUE CHANGE			#Tested	#Failed	
		MIN	MAX	ABS AVG			
Thermal Shock	MIL-R-83401E	-0.247	0.287	0.018	50	0	
Power Conditioning	MIL-R-83401E	-0.156	0.152	0.006	50	0	
Temperature Coefficient	MIL-R-83401E	-14ppm	51ppm	42ppm	10	0	
Low Temp Operation	MIL-R-83401E	-0.003	0.007	0.002	10	0	
Short Time Overload	MIL-R-84401E	-0.016	-0.003	0.008	10	0	
Dielectric Withstand	MIL-R-83401E	Pass	Pass	Pass	10	0	
Insulation Resistance	MIL-R-83401E	Pass	Pass	Pass	10	0	
Resistance to Solder Heat	Immerse in vapor phase of boiling FC-70 Flourinert for 30sec @219C	-0.015	-0.007	0.013	10	0	
Moisture Resistance	MIL-R-83401E	-0.261	0.256	0.033	10	0	
Shock	MIL-R-83401E	-0.002	0.009	0.002	10	0	
Load Life 100% rated power @70c	MIL-R-83401E	250hrs	-0.008	0.024	0.013	10	0
		500hrs	-0.002	0.033	0.026	10	0
		1000hrs	-0.001	0.038	0.028	10	0
		2000hrs	-0.122	0.033	0.025	10	0
High Temp Exposure	MIL-R-83401E	0.014	0.028	0.020	10	0	
Low Temp Storage	MIL-R-83401E	-0.014	-0.005	0.009	10	0	
Load Humidity 70C 90% RH 250hrs 10% rated load 500hrs		250hrs	-0.013	0.005	0.003	10	0
		500hrs	-0.005	0.012	0.005	10	0
		1000hrs	-0.009	0.006	0.002	10	0
Temp Cycle Life 1/2 hr. @ -40C 1/2 hr. @ +125C		500hrs	0.009	0.131	0.019	10	0
		1000hrs	0.006	0.022	0.016	10	0
Power Temp Cycle Life 1/2 hr. @ -40C 1/2 hr. @ +125C 10% load 5min on 5min off		500hrs	0.002	0.018	0.011	10	0
		1000hrs	0.007	0.021	0.015	10	0

PERFORMANCE DATA

CTS Chip Resistor Arrays
 CTS Part Number 745101103J
 BL# 19812

Updated 7/26/95
 DLP

TEST DESCRIPTION	TEST STANDARD	PERCENT VALUE CHANGE			#Tested	#Failed	
		MIN	MAX	ABS AVG			
Thermal Shock	MIL-R-83401E	-0.081	0.070	0.039	50	0	
Power Conditioning	MIL-R-83401E	-0.029	0.015	0.008	50	0	
Temperature Coefficient	MIL-R-83401E	-30ppm	74ppm	43ppm	10	0	
Low Temp Operation	MIL-R-83401E	-0.036	0.026	0.007	10	0	
Short Time Overload	MIL-R-84401E	-0.011	0.010	0.003	10	0	
Dielectric Withstand	MIL-R-83401E	Pass	Pass	Pass	10	0	
Insulation Resistance	MIL-R-83401E	Pass	Pass	Pass	10	0	
Resistance to Solder Heat	Immerse in vapor phase of boiling FC-70 Flourinert for 30sec @219C	-0.158	0.029	0.044	10	0	
Moisture Resistance	MIL-R-83401E	0.004	0.054	0.018	10	0	
Shock	MIL-R-83401E	-0.038	0.112	0.008	10	0	
Load Life	MIL-R-83401E	250hrs	0.059	0.104	0.083	10	0
100% rated power @70c		500hrs	0.086	0.143	0.117	10	0
		1000hrs	0.107	0.163	0.133	10	0
		2000hrs	0.109	0.166	0.136	10	0
High Temp Exposure	MIL-R-83401E	0.072	0.122	0.097	10	0	
Low Temp Storage	MIL-R-83401E	-0.149	-0.003	0.023	10	0	
Load Humidity		250hrs	0.053	0.076	0.064	10	0
70C 90% RH 250hrs		500hrs	0.053	0.084	0.070	10	0
10% rated load 500hrs		1000hrs	0.065	0.104	0.089	10	0
Temp Cycle Life		500hrs	0.059	0.120	0.103	10	0
1/2 hr. @ -40C		1000hrs	0.075	0.149	0.127	10	0
1/2 hr. @ +125C							
Power Temp Cycle Life		500hrs	0.038	0.169	0.011	10	0
1/2 hr. @ -40C		1000hrs	0.085	0.221	0.177	10	0
1/2 hr. @ +125C							
10% load 5min on 5min off							