

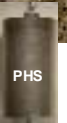
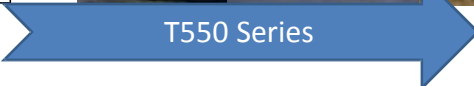
T550 Polymer Hermetic Seal Series

Preliminary
Data Sheet
June, 2012



Specifications

Item	Performance Characteristics
Operating Temperature	-55° C to 105° C (up to 125°C Under Development)
Capacitance Range	100µF to 120µF @ 120 Hz/25° C
Capacitance Tolerance	K (+10%) and M (+20%) Tolerance
Rated Voltage Range	25V - 60V (up to 125V Under Development)
DF (120Hz)	Refer to Part Number Electrical Specification
ESR (100KHz)	Refer to Part Number Electrical Specification
Leakage Current	≤ 0.0075CV (µA) at rated voltage after 5 minutes
Packaging	According MIL-PRF-39006



Part Number Explanation

T	550	B	107	M	060	A	H
Capacitor Class	Series	Case Size	Capacitance Code (pF)	Capacitance Tolerance	Voltage	Failure Rate Designator	Lead Material
T = Tantalum	550 Polymer Hermetically Sealed TH package	A, B, C, D according MIL PRF 39006 A=T1 B=T2 C=T3 D=T4	First two digits represent significant figures. Third digit specifies number of zeros.	K = ±10% M = ±20%	025 = 25V 035 = 35V 050 = 50V 060 = 60V	A = N/A	H = Standard Solder Coated (SnPb 5% Pb minimum T = 100% Matte Tin (Sn) Plated*)

Part Number and Electrical Specification Table

KEMET Part Number	Case	Rated Cap(µF)	Rated Voltage (Vr)	max DCL Vr, RT (µA) @ 5min	max DF 120Hz, RT (%)	max ESR
						(mOhm, RT, 100kHz)
25V at 85° and 19V at 105°C						
T550B107(1)025A(2)	B	100	25	18.8	5.0	190
40V at 85° and 31V at 105°C						
T550B107(1)040A(2)	B	100	40	30.0	5.0	150
T550B127(1)040A(2)	B	120	40	36.0	5.0	120
50V at 85° and 39V at 105°C						
T550B107(1)050A(2)	B	100	50	37.5	5.0	130
T550B127(1)050A(2)	B	120	50	45.0	5.0	90
60V at 85° and 47V at 105°C						
T550B107(1)060A(2)	B	100	60	45.0	5.0	100

(1) To complete KEMET part number, insert "K" for +/- 10% or "M" for +/- 20% capacitance tolerance
 (2) To complete KEMET part number, insert "H" for Solder Coated or "T" for 100% Matte Tin Plated

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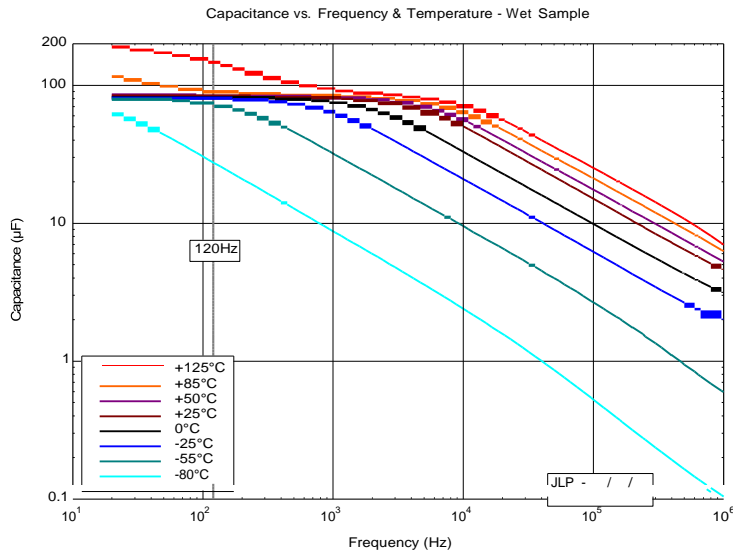


Programs Supported	Advantages Over Wet Tantalum
Military/Aerospace	Low and stable ESR across temperature range and frequency
Transportation	Stable capacitance across temperature range and frequency
Industrial	Reverse voltage capability
Alternative Energies	Non-catastrophic failure mode
	Mechanical robustness (shock and vibration)
	Lighter weight (~25%) and same case sizes as Wet Tantalum

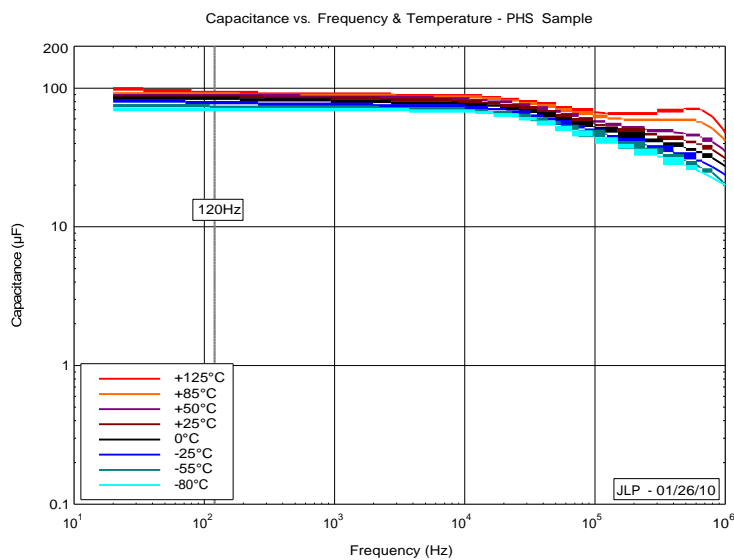


Frequency Performance

Stable Capacitance Across Temperature Range and Frequency (-80°C, -55°C, -25°C, 0°C, 25°C, 50°C, 85°C and 125°C)



Wet tantalum



Polymer HS

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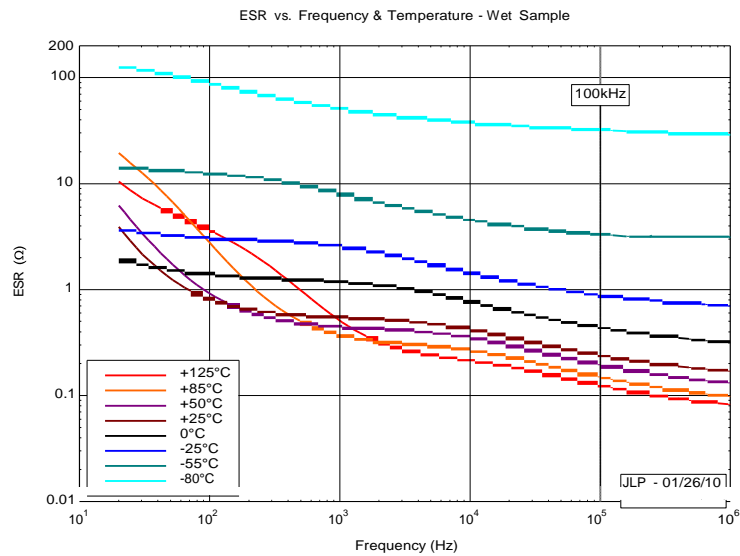


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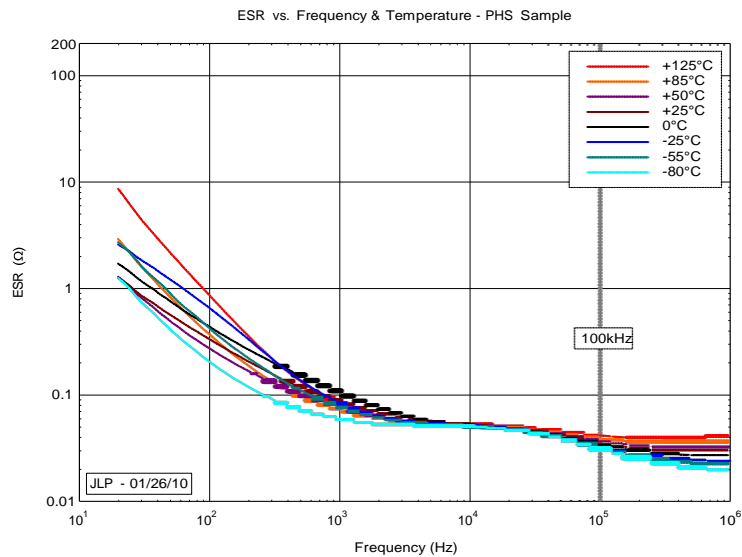


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Wet tantalum



Polymer HS

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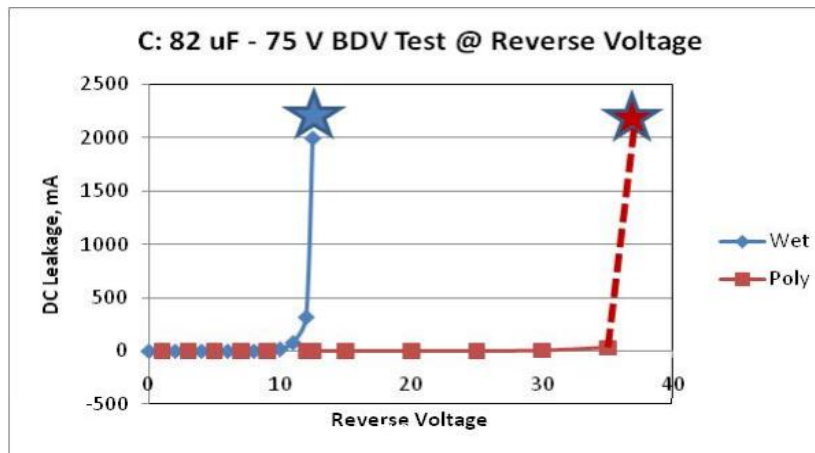
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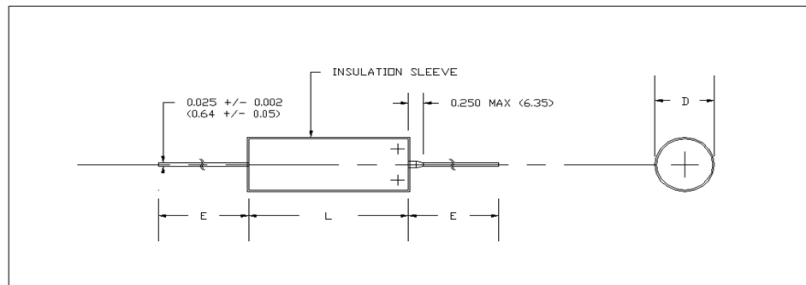
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Reverse Voltage Capability



Component Dimensions



Dimensions					
Case Code	MIL-PRF-39006/22/25/30/31 Case Size	Uninsulated Case		Insulated Case	E ±0.25(6.35)
		L +0.031(0.79) -0.016(0.41)	D ±0.016(0.41)	D Max .	
A	T1	0.453(11.51)	0.188(4.78)	0.219(5.56)	1.50(38.10)
B	T2	0.641(16.28)	0.281(7.14)	0.312(7.92)	*1.50(38.10)
C	T3	0.766(19.46)	0.375(9.52)	0.406(10.31)	2.25(57.15)
D	T4	1.062(26.97)	0.375(9.52)	0.406(10.31)	2.25(57.15)

* Lead length of 2.25" available upon request

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