

# T521 Series - High Voltage Polymer

## Product Specification

### Features

- High Voltage (20V - 35V)
- 15uF Capacitance value
- High Ripple Current Capability
- Long Life 125° C/2000 Hrs
- Stable temperature characteristics
- Safe failure mode
- Low ESR (125mOhm)
- Pb Free<sup>#</sup>/RoHS Compliant & Halogen Free

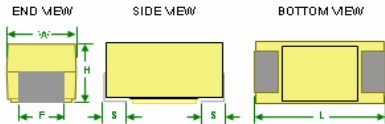
<sup>#</sup> When ordered with 100% Sn Termination Finish

### Specifications

Item	Performance Characteristics					
Operating Temperature	-55° C to 125° C					
Rated Capacitance Range	15uF - 47uF @ 120 Hz/25° C					
Capacitance Tolerance	M Tolerance (20%)					
Rated Voltage Range	20V - 35V					
Dissipation Factor (DF)	≤ 10%					
ESR (100KHz)	Refer to Part Number Electrical Specification Table					
Leakage Current	≤ 0.1CV (μA) at Rated Voltage after 5 minutes					
Endurance	105° C @ Rated Voltage, 2000 Hrs. 125° C @ 2/3 Rated Voltage, 2000 Hrs.	ΔC/C	Within -20/+10 of initial value			
		DF	≤ Initial Limit			
		DCL	Within initial limit			
Humidity	60° C, 90% RH, 500Hr, No Load	ΔC/C	Within -5%/+35% of initial value			
		DF	≤ Initial Limit			
		DCL	Within 3.0 x initial limit			
Temperature Stability	Extreme temperature exposure at a succession of continuous steps at +25 C, -55 C, +25 C, +85 C, +125 C, +25 C.	ΔC/C	IL*	+/-20%	+/-20%	+/-30%
		DF	IL	IL	1.2 x IL	1.5 x IL
		DCL	IL	n/a	10 x IL	10 x IL
				+25°C	-55°C	+85°C
Surge Voltage	105°C, 1.32 x Rated Voltage 1000 cycles	ΔC/C	Within -20/+10 of initial value			
		DF	Within initial limits			
		DCL	Within initial limits			
		ESR	Within initial limits			

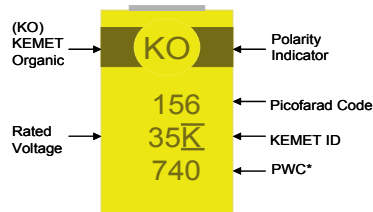
\* IL = Initial Limit

### Component Dimensions and Case Codes



Case Codes		Component Dimensions (mm)				
KEMET	EIA	L	W	H	F ± 0.1	S ± 0.3
V	7343-20	7.3±0.3	4.3±0.3	1.9 max	2.4	1.3

### Component Marking



\* 740 = 40<sup>th</sup> week of 2007

### Explanation of Part Number

<b>T521</b> Series	<b>V</b> Case Code	<b>156</b> Capacitance	<b>M</b> Capacitance Tolerance (M=20%)	<b>035</b> Voltage	<b>A</b> Failure Rate (A=Not Applicable)	<b>I</b> Termination Material T = 100% Sn (H = 90%Sn/10%Pb)	<b>E125</b> Maximum ESR Limit E125=125mΩ
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### Part Number Specification

KEMET Part Number	KEMET Part Number	Cap (μF)	Voltage	DCL VR (μA)	DF 120Hz (%)	ESR 100KHz (mΩ)	Maximum allowable ripple current (mArms) 100kHz*	MSL Reflow Temp ≤260°C
T521V156M035A(1)E125	V/7343-20	15	35	52.5	10	125	1200.0	3.0

(1) To complete KEMET Part Number, insert letter designation for lead frame material

\*100KHz to 500KHz, 45 C