

# T521 Series - High Voltage Polymer

## Product Specification

### Features

- High Voltage (16V - 35V)
- Up to 68uF Capacitance value
- High Ripple Current Capability
- Volumetrically Efficient
- Safe failure mode
- Low ESR
- Stable temperature characteristics
- Pb Free<sup>#</sup>/RoHS Compliant & Halogen Free

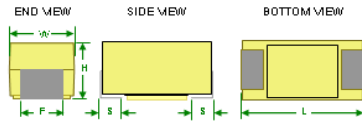
\* When ordered with 100% Sn Termination Finish

### Specifications

Item	Performance Characteristics					
Operating Temperature	-55° C to 125° C					
Rated Capacitance Range	15uF - 68uF @ 120 Hz/25° C					
Capacitance Tolerance	M Tolerance (20%)					
Rated Voltage Range	16V - 35V					
Dissipation Factor (DF)	≤ 10%					
ESR (100KHz)	Refer to Part Number Electrical Specification Table					
Leakage Current	≤ 0.1CV (uA) 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	IL @ 105° C, 2x IL @ 125° C			
		ESR	2x 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
		ESR	IL	n/a	10 x IL	10 x IL
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			

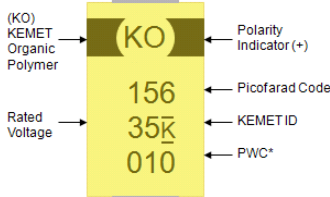
\* IL = Initial Limit

### Component Dimensions and Case Codes



Case Codes		Component Dimensions (mm)				
		L	W	H	F ± 0.1	S ± 0.3
KEMET	EIA					
V	7343-20	7.3±0.3	4.3±0.3	1.9 max	2.4	1.3
W	7343-15	7.3±0.3	4.3±0.3	1.5 max	2.4	1.3
D	7343-31	7.3±0.3	4.3±0.3	2.8±0.3	2.4	1.3
X	7343-43	7.3±0.3	4.3±0.3	4.0±0.3	2.4	1.3

### Component Marking



\* 010 = 10<sup>th</sup> week of 2010

### Explanation of Part Number

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

### Part Number Specification

KEMET Part Number	Case Code/ EIA Case Size	Cap (uF)	Voltage	DCL VR (uA)	DF 120Hz (%)	ESR 100KHz* (mΩ)	Maximum allowable ripple current (mArms) 100KHz*	MSL Reflow Temp ≤260°C
T521V686M016A(1)E050#	V/7343-20	68	16	108.8	10	50	1900.0	3.0
T521V476M020A(1)E090	V/7343-20	47	20	94.0	10	90	1400.0	3.0
T521D476M020A(1)E055	D/7343-31	47	20	94.0	10	55	1700.0	3.0
T521V226M025A(1)E060#	V/7343-20	22	25	55.0	10	60	1800.0	3.0
T521D336M025A(1)E060#	D/7343-31	33	25	82.5	10	60	1600.0	3.0
T521V156M035A(1)E125	V/7343-20	15	35	52.5	10	125	1200.0	3.0
T521X476M035A(1)E070#	X/7343-43	47	35	164.5	10	70	1500.0	3.0

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

\*100KHz to 500KHz, 45 C

# Development Part Number: Contact Kemet for Details