T520 Series - Polymer, Low ESR

Product Specification

Features

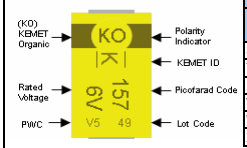
- ESR as low as 6mOhms
- Capacitance values to 1000uF
- High Frequency Cap Retention
- High Ripple Current Capability
- Voltage Ratings from 2.5V to 25V
- Long Life 105° C/2000 Hrs
- Stable temperature characteristics
- Pb Free/RoHS Compliant & Halogen Free
- Safe failure mode

Specifications

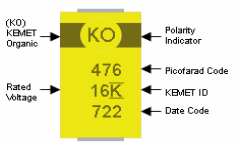
Item	Performance Characteristics					
Operating Temperature	-55° C to 105° C					
Rated Capacitance Range	15 to 1000uF @ 120 Hz/20° C					
Capacitance Tolerance	M Tolerance (20%)					
Rated Voltage Range	2.5 to 25V					
Dissipation Factor (DF)	≤ 10%					
ESR (100KHz)	Refer to Part Number Electrical Specification Table					
Leakage Current	≤ 0.1CV (μA) at Rated Voltage after 5 minutes					
Endurance	105° C @ Rated Voltage, 2000 Hrs.		ΔC/C	Within -20/+10 of initial value		
			DF	≤ Initial Limit		
			DCL	Within 1.25 x initial limit		
			ESR	Within 2.0 x initial limit		
Humidity	60° C, 90% RH, 500Hr		ΔC/C	Within -5%/+35% of initial value		
			DF	≤ Initial Limit		
			DCL	Within 5.0 x initial limit		
			ESR	Within 2.0 x initial limit		
Temperature Stability	Extreme temperature exposure at a succession of continuous steps at +25 C, -55 C, +25 C, +85 C, +105 C, +25 C.			+25°C	-55°C	+85°C	+105°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
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

Marking



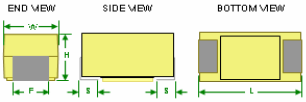
Date Code	
1st Digit = Year	2nd Digit= Month
S=2004	1=January
T=2005	2=February
U=2006	3=March
V=2007	4=April
W=2008	5=May
X=2009	6=June
	7=July
	8=August
	9=Sept
	O=October
	N=Nov
	D=Dec



Date Code	
1st Digit = Year	2nd & 3rd Digit = Week
4=2004	22= 22nd week
5=2005	
6=2006	
7=2007	
8=2008	
9=2009	

Dimensions

Case Codes		Component Dimensions (mm)				
KEMET	EIA	L	W	H	F ± 0.1	S ± 0.3
A	3216-18	3.2±0.2	1.6±0.2	1.6±0.2	1.2	0.8
B	3528-20	3.5±0.2	2.8±0.2	1.9±0.1	2.2	0.8
T	3528-12	3.5±0.2	2.8±0.2	1.2 max	2.2	0.8
M	3528-15	3.5±0.2	2.8±0.2	1.5 max	2.2	0.8
C	6032-28	6.0±0.3	3.2±0.3	2.5±0.3	2.2	1.3
L	6032-19	6.0±0.3	3.2±0.3	1.9 max	2.2	1.3
U	6032-15	6.0±0.3	3.2±0.3	1.5 max	2.2	1.3
W	7343-15	7.3±0.3	4.3±0.3	1.5 max	2.4	1.3
V	7343-20	7.3±0.3	4.3±0.3	2.0 max	2.4	1.3
D	7343-31	7.3±0.3	4.3±0.3	2.8±0.3	2.4	1.3
Y	7343-40	7.3±0.3	4.3±0.3	4.0 max	2.4	1.3
X	7343-43	7.3±0.3	4.3±0.3	4.0±0.3	2.4	1.3



Part Number Specification

KEMET Part Number	Case Code/ Case Size	Rated Capacitance (μF)	Rated Voltage (V)	DC Leakage μA @ 20°C max/5min	DF% @ 20°C 120 Hz Max	ESR mΩ @ 20°C 100 kHz Max	Maximum allowable ripple current (mArms) 100kHz*	MSL Reflow Temp ≤260°C
T520W227M2R5A(1)E025	W/7343-15	220	2.5	55	10	25	2700	3
T520Y157M010A(1)E018	Y/7343-40	150	10	150	10	18	3700	3
T520Y157M010A(1)E025	Y/7343-40	150	10	150	10	25	3100	3
T520D157M010A(1)E015	D/7343-31	150	10	150	10	15	3900	3
T520D157M010A(1)E018	D/7343-31	150	10	150	10	18	3500	3
T520V227/010A(1)E045	V/7343-19	220	10	220	10	45	2000	3
T520T107M2R5A(1)E040	T/3528-12	100	2.5	25	8	40	1600	3

*100KHz to 500KHz, 45 C