

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
		ΔC/C	IL*	+/-20%
		DF	IL	IL
		DCL	IL	n/a
Surge Voltage	105°C, 1.32 x rated voltage 1000 cycles	+105°C	+/-20%	+/-30%
		ΔC/C	Within -20/+10 of initial value	1.2 x IL
		DF	Within initial limits	1.5 x IL
		DCL	Within initial limits	10 x IL
		ESR	Within initial limits	10 x IL

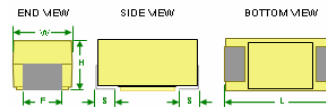
* IL = Initial Limit

Marking

Date Code		Date Code	
1st Digit = Year	2nd Digit = Month	1st Digit = Year	2nd & 3rd Digit = Week
S=2004	1=January	4=2004	
T=2005	2=February	5=2005	22= 22nd week
U=2006	3=March	6=2006	
V=2007	4=April	7=2007	
W=2008	5=May	8=2008	
X=2009	6=June	9=2009	
	7=July		
	8=August		
	9=Sept		
	0=October		
	N=Nov		
	D=Dec		

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 (mA rms) 100kHz*	MSL Reflow Temp ≤260°C
T520B106M016A(1)E100	B/3528-20	10	16	16	8	100	1100	3

*100KHz to 500KHz, 45 C