

T528 Series - Polymer FaceDown, Low ESR, Low ESL

Product Specification

Features

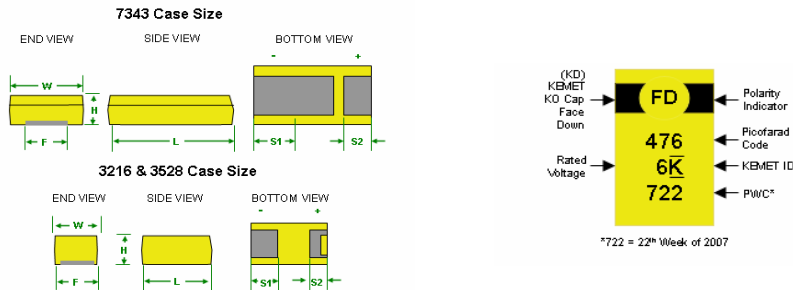
- ESR as low as 8mOhms
- Capacitance values to 470uF
- High Frequency Cap Retention
- Low ESL <0.7nH @ 20 MHz
- Voltage Ratings from 2.5V to 10V
- High Ripple Current Capability
- Long Life 105° C/2000 Hrs
- Stable temperature characteristics
- Pb Free/RoHS Compliant & Halogen Free
- Safe failure mode

Specifications

Item	Performance Characteristics					
Operating Temperature	-55° C to 105° C					
Rated Capacitance Range	33 to 470uF @ 120 Hz/25° C					
Capacitance Tolerance	M Tolerance (20%)					
Rated Voltage Range	2.5 to 10V					
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 and Dimensions



Case Codes		Component Dimensions (mm)					
KEMET	EIA	L	W	H	F	S1	S2
I	3216-10	3.2±0.2	1.6±0.2	1.0 max	1.2	1	0.7
M	3528-15	3.5±0.2	2.8±0.2	1.5 max	2.0	1.2	0.6
K	3528-10	3.5±0.2	2.8±0.2	1.0 max	2.0	1.2	0.6
T	3528-12	3.5±0.2	2.8±0.2	1.2 max	2.0	1.2	0.6
Z	7343-17	7.3±0.4	4.3±0.3	1.7 max	2.8	5.1	1.3

Part Number Specification

KEMET Part Number	Case	Cap (µF)	Voltage	DCL VR (µA)	DF 120Hz (%)	ESR 100KHz (mΩ)	Ripple Current (Arms) 100KHz	
							ΔT=20°C @ -55°C to 85°C	ΔT=2°C @105°C
T528K157M006ATE150	K/3528-10	150	6.3	94.5	10	150	1.0	0.3
T528K157M006ATE200	K/3528-10	150	6.3	94.5	10	200	0.9	0.3