

Preliminary Specification

KO-CAP (KEMET Organic Capacitor)

T523H107M035APE070: 7360-20, 100 uF, 35 V, 70 mΩ

KOCAP

Polymer Capacitors

Environmental Compliance

RoHS Compliant (6/6) per EU Directive 2002/95/EC

Halogen Free

Part Number Information

Capacitor Class	Series	Case Size	Capacitance Code	Capacitance Tolerance	Voltage	Failure Rate/ Design	Lead Material	ESR Code	
T Tantalum	523 Facedown Polymer	H 7360-20	107 100 uF	M ± 20%	035 35 V	A N/A	P Ni-Pd-Au Plated	E070 70 mΩ	

Performance Characteristics

KEMET Part Number	Rated Voltage (V)	Rated Capacitance (uF)	DC Leakage μ A @ V_r , 25°C Maximum/ 5 Minutes	DF % @ 25°C, 120 Hz Maximum	ESR mΩ @ 25°C 100kHz Maximum	Maximum Allowable Ripple Current mA rms @ 45° C 100kHz	MSL Reflow Temp ≤260°C	Maximum Operating Temperature °C
T523H107M035APE070	35	100	350	10	70	2500	3	85

Qualification

Test	Condition	Characteristics			
Endurance	85° C @ Rated Voltage, 2000 hours	Δ C/C	Within -20/+10% of initial value		
		DF	Within initial limit		
		DCL	Within 1.25 x initial limit		
		ESR	Within 2.0 x initial limit		
Storage	85° C @ 0 Volts, 2000 hours	Δ C/C	Within -20/+10% of initial value		
		DF	Within initial limit		
		DCL	Within 1.25 x initial limit		
		ESR	Within 2.0 x initial limit		
Humidity	60° C, 90% RH, 500 hours, No Load	Δ C/C	Within -5/+35% of initial value		
		DF	Within 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, +25°C		+25°C	-55°C	+85°C
		Δ C/C	Initial Limit	+20%	+20%
		DF	Initial Limit	Initial Limit	1.2 x Initial Limit
		DCL	Initial Limit	N/A	10 x Initial Limit
Surge Voltage	85° C, 1.32 x Rated Voltage, 33 Ω Resistance, 1000 cycles	Δ C/C	Within -20/+10% of initial value		
		DF	Within initial limit		
		DCL	Within initial limit		
		ESR	Within initial limit		
Mechanical Shock/ Vibration	MIL-STD-202, Method 213, Condition I, 100G Peak MIL-STD-202, Method 204, Condition D, 10 Hz to 2000 Hz, 20G Peak	Δ C/C	Within ±10% of initial value		
		DF	Within initial limit		
		DCL	Within initial limit		

The Capacitance Company
KEMET
 CHARGED!

Preliminary Specification

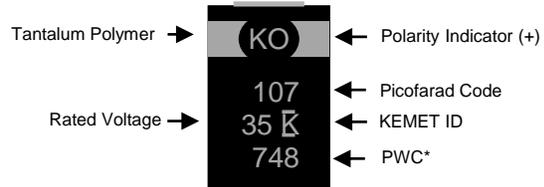
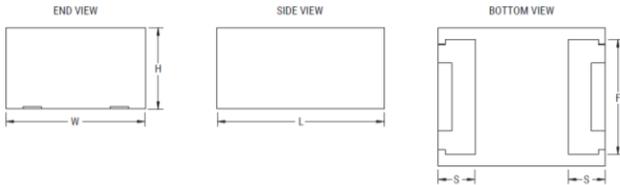
KO-CAP (KEMET Organic Capacitor)

T523H107M035APE070: 7360-20, 100 uF, 35 V, 70 mΩ



Dimensions (units: mm)

Case Size		Component Dimensions				
KEMET	EIA	L	W	H	F	S
H	7360-20	7.3 ± 0.3	6.0 ± 0.3	1.9 ± 0.10	4.45 ± 0.10	1.60 ± 0.30

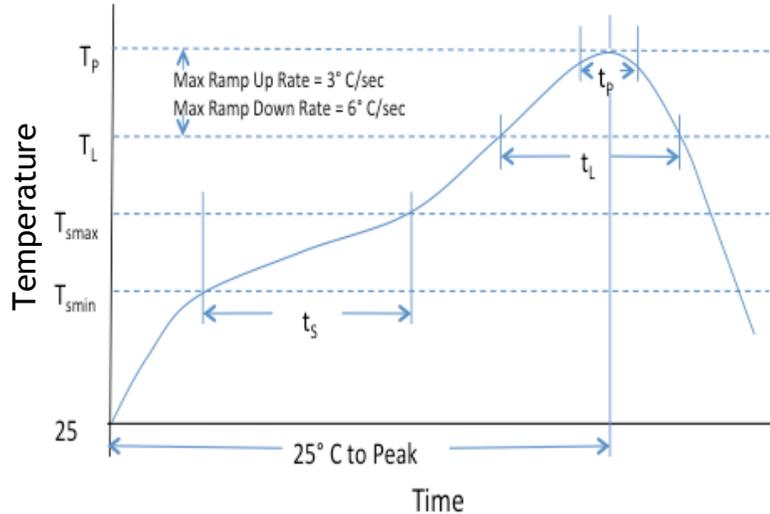


* 748 = 48th week of 2017

Manufacturing Location(s)

	Continent	Country	Region
Fabrication Site	North America	US	South Carolina
Assembly/Packaging Site	North America	US	South Carolina
Test Site	North America	US Mexico	South Carolina Tamaulipas

Reflow Profile



Profile Feature	Pb-Free Assembly
Preheat/Soak	
Temperature Minimum (T_{smin})	150° C
Temperature Maximum (T_{smax})	200° C
Time (t_s) from T_{smin} to T_{smax}	60-120 seconds
Ramp-up Rate (T_L to T_P)	3° C/sec maximum
Liquidous Temperature (T_L)	217° C
Time Above Liquidous (t_L)	60-150 seconds
Peak Temperature (T_P)	250° C* 260° C**
Time within 5° C of Maximum Peak Temperature (t_p)	30 seconds maximum
Ramp-down Rate (T_P to T_L)	6° C/second maximum
Time 25° C to Peak Temperature	8 minutes maximum

Note: All temperatures refer to the center of the package, measured on the package body surface that is facing up during assembly reflow.

* Package Thickness ≥ 2.5 mm

** Package Thickness < 2.5 mm

The Customer acknowledges the following limitations of the prototype samples: (1) prototype samples are manufactured from preliminary designs and manufacturing processes, may not represent final designs, have not been released for commercial use and are not subject to the same quality control procedures applicable to released products; (2) prototype samples are not qualified parts and are provided as-is by KEMET Electronics Corporation, which specifically disclaims any and all warranties and guarantees, explicit or implied, including without limitation the warranties of merchantability and fitness for a particular purpose or use; (3) prototype samples are not intended for commercial use, are provided for engineering evaluation only and are not recommended for use in the Customer's production line; and (4) the Customer assumes the risk of any and all uses that the Customer makes of the prototype samples.

COPYRIGHT KEMET ELECTRONICS CORPORATION 2015. All rights reserved

