

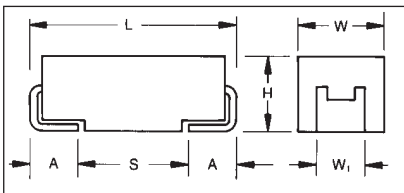
THJ Series with Extensions to 200°C



High Temperature Tantalum Chip Capacitor



- SMD 200°C tantalum capacitor
- 200°C @ 0.33V_R 1000hrs continuous operation
- Leakage current after 200°C 1000hrs less than 1mA
- 3x reflow 260°C
- Gold plated termination for hybrid assembly
- Oil drilling, aerospace, automotive applications



For part marking see page 125

CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	L±0.20 (0.008)	W+0.20 (0.008) -0.10 (0.004)	H+0.20 (0.008) -0.10 (0.004)	W ₁ ±0.20 (0.008)	A+0.30 (0.012) -0.20 (0.008)	S Min.
E	2717	7343-43	7.30 (0.287)	4.30 (0.169)	4.10 (0.162)	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)

W₁ dimension applies to the termination width for A dimensional area only.

HOW TO ORDER

THJ	E	107	*	016	R	JN
Type	Case Size See table above	Capacitance Code pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	Tolerance K=±10% M=±20%	Rated DC Voltage 010=10Vdc 016=16Vdc	Packaging A = Gold Plating 7" Reel B = Gold Plating 13" Reel	Standard Suffix

TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C		
Capacitance Range:	100 µF to 220 µF		
Capacitance Tolerance:	±10%; ±20%		
Leakage Current DCL @ V _R 25°C	0.01CV		
Leakage Current DCL @ V _C 200°C, 1000 hrs	1mA		
Rated Voltage (V _R)	≤ +85°C:	10	16
Category Voltage (V _C)	≤ +200°C:	3.3	5.3
Surge Voltage (V _S)	≤ +85°C:	13	20
	≤ +200°C:	4.3	6.5
Temperature Range:	-55°C up 200°C with voltage derating		
Reliability:	0.5% per 1000 hours at 85°C, V _R with 0.1Ω/V series impedance, 1000 hrs at 200°C, 0.33V _R		
Termination Finished:	Gold Plating Meets requirements of AEC-Q200		

THJ Series with Extensions to 200°C



High Temperature Tantalum Chip Capacitor

CAPACITANCE AND VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated voltage (V _R) to 85°C (Voltage Code)						
μF	Code	6.3V (J)	10V (A)	16V (C)	20V (D)	25V (E)	35V (V)	50V (T)
33	336							
47	476							
68	686							
100	107			E				
150	157		E					
220	227							
330	337							
470	477							
680	687							

Available Ratings

Engineering samples - please contact manufacturer

*Codes under development – subject to change

Note: Voltage ratings are minimum values. AVX reserves the right to supply higher ratings in the same case size, to the same reliability standards

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (μF)	Rated Voltage (V)	DCL (μA) Max.	DCL (mA) max. @ Vc 200°C, 1000hrs.	DF % Max.	ESR Max. (Ω) @ 100 kHz
Voltage Rating		10V @ 85°C (3.3V @ 200°C)/A					
THJE227*010#JH	E	220	10	22	1	10	0.25
Voltage Rating		16V @ 85°C (5.3V @ 200°C)/C					
THJE107*016#JH	E	100	16	16	1	8	0.25

*Insert K for ±10% and M for ±20% capacitance tolerance

Gold Plating – Insert A for 7" reel and B for 13" reel

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

THJ series is MSL level 1 according to J-STD-020C.

NOTE: AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.

