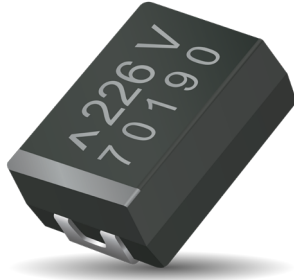


TCS SERIES

QPL ESCC - COTS-Plus Polymer Solid Electrolytic Multianode Capacitor



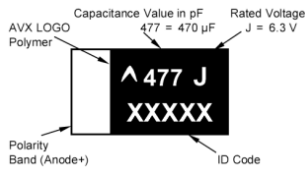
FEATURES

- QPL ESCC approved series
- Manufactured in EU, ESA qualified plant, according to ESCC 3012
- Detailed specification 3012/006
- Robust design for long operation lifetime
- Statistical screening with Accelerated Ageing
- Improved basic reliability 0.5%/1000hrs
- - 55 to +105°C operation temperature
- Low ESR
- CV range 22 - 470µF / 6.3 - 35V



MARKING

E CASE



CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	Variant	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	2917	05	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.

CAPACITANCE AND RATED VOLTAGE, VR (VOLTAGE CODE) RANGE (LETTER DENOTES CASE SIZE)

Capacitance µF	Code	Rated voltage DC (VR) to 85°C					
		6.3V (J)	10V (A)	16V (C)	20V (D)	25V (E)	35V (V)
22	226						E(50)
33	336					E(50)	
68	686				E(25)		
150	157			E(20)			
220	227		E(15)	E(20)			
330	337	E(12)	E(15)				
470	477	E(12)					

Available Ratings, ESR limited quoted in brackets (mOhms)

HOW TO ORDER

TCS	E	477	M	006		U	0	@	^
Type	Case Size	Capacitance Code	Tolerance	Rated DC	Packaging SnPb Termination	ESR	LAT	Screening Level	FCSI
	See table above	pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	M = ±20%	006 = 6.3Vdc 010 = 10Vdc 016 = 16Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc	X = 4" E = Bulk H = 7"	U = multianode	0 = N/A 1 = LAT1 2 = LAT2 3 = LAT3	B = Level B (Xray) C = Level C Z = Non-ER (not for fight parts)	0 = N/A 1 = Yes

Not RoHS Compliant

ESCC PART NUMBER - MANDATORY FOR ORDERING

3012 006	05	#	477	M	J	0012
Detail Specification	Variant	Testing Level	Capacitance Code	Tolerance	Voltage	ESR in mΩ
	05	B = Level B (X ray) C = Level C	pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	M = ±20%	J = 6.3V A = 10V C = 16V D = 20V E = 25V V = 35V	

Not RoHS Compliant

TCS SERIES

QPL ESCC - COTS-Plus Polymer Solid Electrolytic Multianode Capacitor



LAT TESTING

AVX can perform the following Lot Acceptance Testing according to ESCC

- LAT 3 Qty. 10 pcs. - 4 pieces of which are “destructive samples”, the remaining 6 pieces may be for part of the Order Qty. OR be additional to the order Qty
- LAT 2 Qty. 26 pcs. - including the 10 pieces of LAT3. The additional 16 pieces are “destructive samples”.
- LAT 1 Qty. 34 pcs. - including the 26 pieces of LAT2. The additional 8 pieces are all “destructive samples”.

OPTION

Packaging: Tape and reel available on request – Contact manufacturer

RATINGS & PART NUMBER REFERENCE

ESCC Part No.	AVX Part No.	Case Size	Capacitance (μF)	Rated Voltage (V)	DCL Max. (μA)	DF Max. (%)	ESR Max. @ 100kHz (mΩ)	100kHz Ripple Current (mA) Ratings			100kHz Ripple Voltage (mV) Ratings		
								45°C	85°C	105°C	45°C	85°C	105°C
6.3 Volt													
301200605#337MJ0012	TCSE337M006□U0@^	E	330	6.3	198	8	12	5800	4100	2600	70	49	31
301200605#477MJ0012	TCSE477M006□U0@^	E	470	6.3	282	8	12	5800	4100	2600	70	49	31
10 Volt													
301200605#227MA0015	TCSE227M010□U0@^	E	220	10	220	8	15	5200	3600	2300	78	54	35
301200605#337MA0015	TCSE337M010□U0@^	E	330	10	330	8	15	5200	3600	2300	78	54	35
16 Volt													
301200605#157MC0020	TCSE157M016□U0@^	E	150	16	240	8	20	4500	3200	2000	90	64	40
301200605#227MC0020	TCSE227M016□U0@^	E	220	16	352	8	20	4500	3200	2000	90	64	40
20 Volt													
301200605#686MD0025	TCSE686M020□U0@^	E	68	20	136	8	25	4000	2800	1800	100	70	45
25 Volt													
301200605#336ME0050	TCSE336M025□U0@^	E	33	25	82.5	8	50	2900	2000	1300	145	100	65
35 Volt													
301200605#226MV0050	TCSE226M035□U0@^	E	22	35	77	8	50	2900	2000	1300	145	100	65

The parts are supplied in dry pack with Moisture Sensitivity Level (MSL) level 3 - defined according to J-STD-020

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

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.