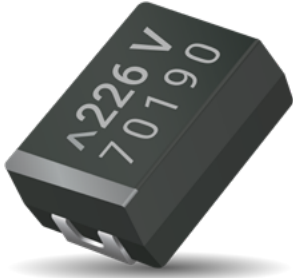


# TCS SERIES - QPL ESCC

## Polymer Solid Electrolytic Multianode Capacitor

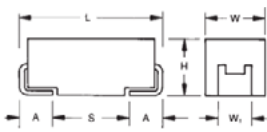
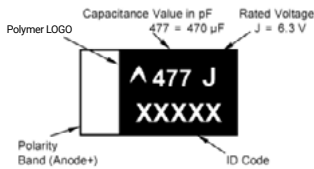


### FEATURES

- 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 15 - 680µF / 4 - 50V



### 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)	W1±0.20 (0.008)	A+0.30 (0.012) -0.20 (0.008)	S Min.
E	2917	01	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)

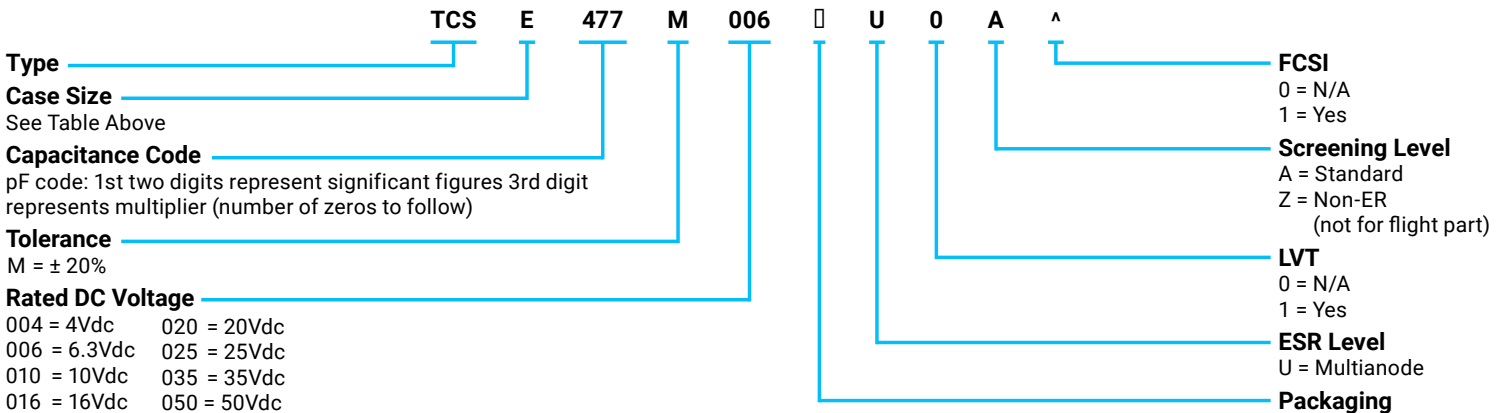
W<sub>1</sub> dimension applies to the termination width for A dimensional area only.

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

Capacitance		Rated voltage DC (VR) to 85°C							
µF	Code	4V (G)	6.3V (J)	10V (A)	16V (C)	20V (D)	25V (E)	35V (V)	50V (T)
15	156								E(100)
22	226							E(50)	E(75)
33	336						E(50)	E(50)	
47	476						E(50)		
68	686					E(25)			
100	107					E(25)			
150	157				E(20)				
220	227			E(15)	E(20)				
330	337		E(12)	E(15)					
470	477	E(12)	E(12)						
680	687	E(12)							

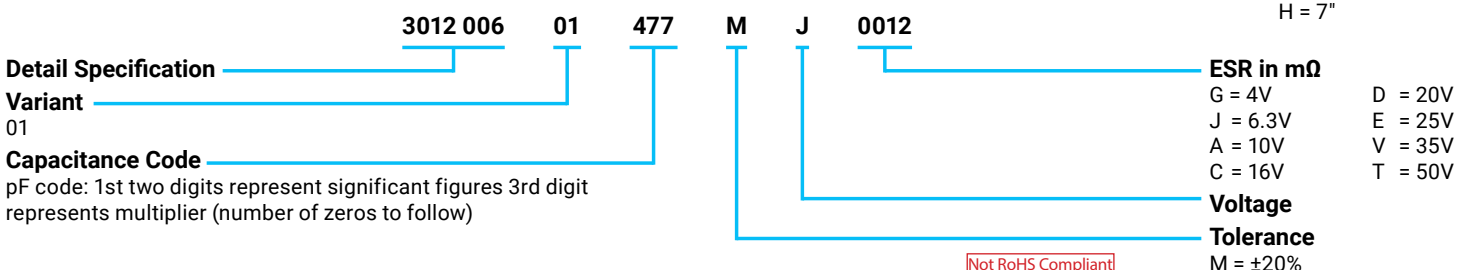
Available Ratings, ESR limited quoted in brackets (mOhms)

### HOW TO ORDER PART NUMBER



Not RoHS Compliant

### ESCC PART NUMBER – MANDATORY FOR ORDERING



Not RoHS Compliant

# TCS SERIES - QPL ESCC

## Polymer Solid Electrolytic Multianode Capacitor



### OPTION

Packaging: Tape and reel available on request – Contact manufacturer

### RATINGS & PART NUMBER REFERENCE

ESCC Part No.	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
<b>4 Volt</b>													
301200601477MG0012	TCSE477M004□U0A <sup>^</sup>	E	470	4	188	8	12	5800	4100	2600	70	49	31
301200601687MG0012	TCSE687M004□U0A <sup>^</sup>	E	680	4	272	8	12	5800	4100	2600	70	49	31
<b>6.3 Volt</b>													
301200601337MJ0012	TCSE337M006□U0A <sup>^</sup>	E	330	6.3	198	8	12	5800	4100	2600	70	49	31
301200601477MJ0012	TCSE477M006□U0A <sup>^</sup>	E	470	6.3	282	8	12	5800	4100	2600	70	49	31
<b>10 Volt</b>													
301200601227MA0015	TCSE227M010□U0A <sup>^</sup>	E	220	10	220	8	15	5200	3600	2300	78	54	35
301200601337MA0015	TCSE337M010□U0A <sup>^</sup>	E	330	10	330	8	15	5200	3600	2300	78	54	35
<b>16 Volt</b>													
301200601157MC0020	TCSE157M016□U0A <sup>^</sup>	E	150	16	240	8	20	4500	3200	2000	90	64	40
301200601227MC0020	TCSE227M016□U0A <sup>^</sup>	E	220	16	352	8	20	4500	3200	2000	90	64	40
<b>20 Volt</b>													
301200601686MD0025	TCSE686M020□U0A <sup>^</sup>	E	68	20	136	8	25	4000	2800	1800	100	70	45
301200601107MD0025	TCSE107M020□U0A <sup>^</sup>	E	100	20	200	8	25	4000	2800	1800	100	70	45
<b>25 Volt</b>													
301200601336ME0050	TCSE336M025□U0A <sup>^</sup>	E	33	25	82.5	8	50	2900	2000	1300	145	100	65
301200601476ME0050	TCSE476M025□U0A <sup>^</sup>	E	47	25	117.5	8	50	2900	2000	1300	145	100	65
<b>35 Volt</b>													
301200601226MV0050	TCSE226M035□U0A <sup>^</sup>	E	22	35	77	8	50	2900	2000	1300	145	100	65
301200601336MV0050	TCSE336M035□U0A <sup>^</sup>	E	33	35	115.5	8	50	2900	2000	1300	145	100	65
<b>50 Volt</b>													
301200601156MT0100	TCSE156M050□U0A <sup>^</sup>	E	15	50	75	10	100	2000	1400	900	200	140	90
301200601226MT0075	TCSE226M050□U0A <sup>^</sup>	E	22	50	110	10	75	2300	1600	1000	173	120	75

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