

Surface Mount Type

POSCAP



Series : **TQC**

Size : **B**

Features

- High voltage (35 V.DC max.)
- RoHS compliance, Halogen free

Specifications

Size code	B2	
Category temperature range	-55 °C to +105 °C	
Rated voltage range	16 V.DC to 35 V.DC	
Category voltage range	16 V.DC to 35 V.DC	
Rated capacitance range	3.9 μF to 33 μF	
Capacitance tolerance	±20 % (120 Hz / + 20 °C)	
Leakage current	Please see the attached characteristics list	
Dissipation factor (tan δ)	Please see the attached characteristics list	
Surge voltage (V.DC)	Rated voltage × 1.15	
Endurance	+105 °C, 2000 h (16TQC33MYFB : 1000 h), rated voltage applied	
	Capacitance change	Within ±20 % of the initial value
	tan δ	≤ 1.5 times of the initial limit
	DC leakage current	Within the initial limit
Damp heat (Steady State)	+60 °C, 90 % to 95 %, 500 h, No-applied voltage	
	Capacitance change	Within +40 %, -20 % of the initial value
	tan δ	≤ 1.5 times of the initial limit
	DC leakage current	≤ 3 times of the initial limit

Marking

R. Voltage (V.DC)	16	20	25	35			
Code	C	D	E	V			
R. Cap. (μF)	3.9	5.6	8.2	10	15	22	33
Code	Q6	U6	Y6	A7	E7	J7	N7

Dimensions (not to scale)

Unit : mm					
Size code	L±0.2	W±0.2	H±0.1	S±0.2	W1±0.1
B2	3.5	2.8	1.9	0.8	2.2
* Externals of figure are the reference.					

Characteristics list

Series	Rated voltage (V.DC)	Rated temp. (°C)	Category voltage (V.DC)	Category temp. (°C)	Rated capacitance (μF)	Case size (mm)			Size code	Specifications				Standard		Floor life	
						L	W	H		Ripple* ¹ current (mA r.m.s.)	ESR* ² (mΩ max.)	tan δ* ³	LC* ⁴ (μA)	Part number	Min. Packaging Qty (pcs)	Reflow Temp ≤ 260°C	Reflow Temp ≤ 250°C
TQC	16	105	16.0	105	10	3.5	2.8	1.9	B2	800	100	0.10	48.0	16TQC10M	2000	-	3
		105	16.0	105	15	3.5	2.8	1.9		1000	90	0.10	72.0	16TQC15M	2000		
		105	16.0	105	22	3.5	2.8	1.9		1000	90	0.10	35.2	16TQC22MYFB	2000		
		105	16.0	105	33	3.5	2.8	1.9		1000	90	0.10	158.4	16TQC33MYFB	2000		
	20	105	20.0	105	8.2	3.5	2.8	1.9		800	100	0.10	49.2	20TQC8R2M	2000		
		105	20.0	105	22	3.5	2.8	1.9		1100	90	0.10	132.0	20TQC22MYFB	2000		
		105	25.0	105	5.6	3.5	2.8	1.9		800	100	0.10	42.0	25TQC5R6M	2000		
		105	25.0	105	15	3.5	2.8	1.9		900	100	0.10	112.5	25TQC15MYFB	2000		
	35	105	35.0	105	3.9	3.5	2.8	1.9		500	400	0.10	40.9	35TQC3R9MYF	2000		
		105	35.0	105	3.9	3.5	2.8	1.9		500	400	0.10	40.9	35TQC3R9MYF	2000		

*¹ Ripple current (100 kHz/ +105 °C), *² ESR (100 kHz/+20 °C) *³ tan δ (120 Hz/+20 °C) *⁴ After 5 minutes

◆ Please refer to each page in this catalog for "Reflow conditions" and "Taping specifications".

Surface Mount Type

POSCAP



Series : **TQC**

Size : **D**

Features

- High voltage (35 V.DC max.)
- RoHS compliance, Halogen free

Specifications

Size code	D12	D15	D2	D3L
Category temperature range	-55 °C to +105 °C			
Rated voltage range	16 V.DC	16 V.DC to 25 V.DC	16 V.DC to 35 V.DC	16 V.DC to 25 V.DC
Category voltage range	16 V.DC	16 V.DC to 25 V.DC	16 V.DC to 35 V.DC	16 V.DC to 25 V.DC
Rated capacitance range	33 µF	22 µF to 47 µF	10 µF to 100 µF	68 µF to 150 µF
Capacitance tolerance	±20 % (120 Hz / + 20 °C)			
Leakage current	Please see the attached characteristics list			
Dissipation factor (tan δ)	Please see the attached characteristics list			
Surge voltage (V.DC)	Rated voltage × 1.15			
Endurance	+105 °C, 2000 h, rated voltage applied			
	Capacitance change	Within ±20 % of the initial value		
	tan δ	≤ 1.5 times of the initial limit		
	DC leakage current	Within the initial limit		
Damp heat (Steady State)	+60 °C, 90 % to 95 %, 500 h, No-applied voltage			
	Capacitance change	Within +40 %, -20 % of the initial value		
	tan δ	≤ 1.5 times of the initial limit		
	DC leakage current	≤ 3 times of the initial limit		

Marking

R. Voltage (V.DC)	16	20	25	35
Code	C	D	1E	V

Dimensions (not to scale)

Unit : mm					
Size code	L±0.2	W±0.2	H±0.1	S±0.2	W1±0.1
D12	7.3	4.3	1.15	1.3	2.4
D15	7.3	4.3	1.4	1.3	2.4
D2	7.3	4.3	1.9	1.3	2.4
D3L	7.3	4.3	2.8	1.3	2.4

* Externals of figure are the reference.
 * 1 ±0.3 : D3L
 * 2 ±0.05 : D12, ±0.2 : D3L

Characteristics list

Series	Rated voltage (V.DC)	Rated temp. (°C)	Category voltage (V.DC)	Category temp. (°C)	Rated capacitance (µF)	Case size (mm)			Size code	Specifications				Standard		Floor life	
						L	W	H		Ripple current *1 (mA r.m.s.)	ESR *2 (mΩ max.)	tan δ *3	LC *4 (µA)	Part number	Min. Packaging Qty (pcs)	Reflow Temp ≤260°C	Reflow Temp ≤250°C
TQC	16	105	16.0	105	33	7.3	4.3	1.15	D12	1800	40	0.10	52.8	16TQC33MYFS	4500	-	3
		105	16.0	105		7.3	4.3	1.9	D2	1400	70	0.10	52.8	16TQC33MYFD	3000		
		105	16.0	105		7.3	4.3	1.4	D15	1500	55	0.10	75.2	16TQC47MYFT	3000		
		105	16.0	105	47	7.3	4.3	1.9	D2	1800	40	0.10	75.2	16TQC47MW	3000		
		105	16.0	105		7.3	4.3	1.9		1450	55	0.10	75.2	16TQC47MYFD	3000		
		105	16.0	105	68	7.3	4.3	1.9		1500	50	0.10	108.8	16TQC68MYF	3000		
		105	16.0	105	100	7.3	4.3	1.9		1800	50	0.10	160.0	16TQC100MYF	3000		
		105	16.0	105	150	7.3	4.3	2.8	D3L	1800	50	0.10	240.0	16TQC150MYF	2500		
		105	16.0	105	150	7.3	4.3	1.9	D2	1500	70	0.15	240.0	1CTQC15173F1	3000		
		105	20.0	105	33	7.3	4.3	1.9		1400	60	0.10	66.0	20TQC33MYFD	3000		
		105	20.0	105	47	7.3	4.3	1.9		1450	55	0.10	94.0	20TQC47MYF	3000		
		105	20.0	105		7.3	4.3	1.4	D15	1500	55	0.10	94.0	20TQC47MYFT	3000		
	20	105	20.0	105	100	7.3	4.3	1.9	D2	1250	100	0.15	200.0	20TQC100MD2	3000		
		105	20.0	105		7.3	4.3	2.8	D3L	1700	55	0.10	200.0	20TQC100MYF	2500		
		105	25.0	105	15	7.3	4.3	1.9	D2	1500	45	0.10	38.0	25TQC15MV	3000		
		105	25.0	105		7.3	4.3	1.9		1000	90	0.10	38.0	25TQC15MYFD	3000		
		105	25.0	105		7.3	4.3	1.9		1500	45	0.10	55.0	25TQC22MV	3000		
		105	25.0	105	22	7.3	4.3	1.9		1400	60	0.10	55.0	25TQC22MYFD	3000		
	25	105	25.0	105		7.3	4.3	1.4	D15	1400	70	0.10	55.0	25TQC22MYFT	3000		
		105	25.0	105	33	7.3	4.3	1.9	D2	1400	60	0.10	82.5	25TQC33MYF	3000		
		105	25.0	105	68	7.3	4.3	2.8	D3L	1400	70	0.10	170.0	25TQC68MYF	2500		
		105	35.0	105	10	7.3	4.3	1.9	D2	1000	120	0.10	35.0	35TQC10M	3000		
		105	35.0	105		7.3	4.3	1.9		1000	120	0.10	35.0	35TQC10MYF	3000		
		105	35.0	105	15	7.3	4.3	1.9		900	150	0.10	52.5	35TQC15MYF	3000		

*1 Ripple current (100 kHz/ +105 °C), *2 ESR (100 kHz/+20 °C) *3 tan δ (120 Hz/+20 °C) *4 After 5 minutes

◆ Please refer to each page in this catalog for "Reflow conditions" and "Taping specifications".