

Surface Mount Type

TQC series B size



POSCAP

Features

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

Specifications

Size code	B2	
Category temp. range	-55 °C to +105 °C	
Rated volt. range	16 V to 35 V	
Category volt. range	16 V to 35 V	
Rated cap. range	3.9 µF to 47 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)	Rated voltage × 1.15	
Endurance	+105 °C 2000 h (16TQC33MYFB : 1000 h), rated voltage applied	
	Capacitance change	Within ±20 % of the initial value
	Dissipation factor(tan δ)	≤ 1.5 times of the initial limit
	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
	Dissipation factor(tan δ)	≤ 1.5 times of the initial limit
	Leakage current	≤ 3 times of the initial limit

Marking

Polarity marking (+)		Rated capacitance code		Lot. No.	
Rated voltage code		R. voltage code		Unit : V	
C	16	E	25		
D	20	V	35		
R. capacitance code		R. capacitance code		Unit : µF	
Q6	3.9	A7	10	N7	33
U6	5.6	E7	15	S7	47
Y6	8.2	J7	22		

Dimensions (not to scale)

Unit : mm					
Size code	$L \pm 0.2$	$W \pm 0.2$	$H \pm 0.1$	$S \pm 0.2$	$W1 \pm 0.1$
B2	3.5	2.8	1.9	0.8	2.2

* Externals of figure are the reference.

Characteristics list

Rated voltage (V)	Rated temperature (°C)	Category voltage (V)	Category temperature (°C)	Rated capacitance (μF)	Case size (mm)			Size code	Specifications				Standard		Floor life level	
					L	W	H		Ripple*1 current (mA rms)	ESR*2 (mΩ max.)	tan δ*3	LC*4 (μA)	Part number	Min. packaging q'ty (pcs)	Reflow temp ≤260°C	Reflow temp ≤250°C
16	105	16	105	10	3.5	2.8	1.9	B2	800	100	0.10	48.0	16TQC10M	2000	-	3
	105	16	105	15	3.5	2.8	1.9		1000	90	0.10	72.0	16TQC15M	2000		
	105	16	105	22	3.5	2.8	1.9		1000	90	0.10	35.2	16TQC22MYFB	2000		
	105	16	105	33	3.5	2.8	1.9		1000	90	0.10	158.4	16TQC33MYFB	2000		
	NEW 105	16	105	47	3.5	2.8	1.9		1000	90	0.15	225.6	16TQC47MYFB	2000	3	
20	105	20	105	8.2	3.5	2.8	1.9		800	100	0.10	49.2	20TQC8R2M	2000	-	
	105	20	105	22	3.5	2.8	1.9		1100	90	0.10	132.0	20TQC22MYFB	2000		
	105	25	105	5.6	3.5	2.8	1.9		800	100	0.10	42.0	25TQC5R6M	2000		
25	105	25	105	15	3.5	2.8	1.9		900	100	0.10	112.5	25TQC15MYFB	2000	3	
	NEW 105	25	105	22	3.5	2.8	1.9		1100	100	0.10	165.0	25TQC22MYFB	2000		
	105	35	105	3.9	3.5	2.8	1.9		500	400	0.10	40.9	35TQC3R9MYF	2000		
35	NEW 105	35	105	10	3.5	2.8	1.9		900	150	0.15	105.0	35TQC10MYFB	2000	3	

*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", "Taping specifications" and "Floor life level".

◆ Small order quantity (500 pcs/reel) is available with TQC series. Please contact our sales representative if you prefer it.

Surface Mount Type

TQC series **D** size



POSCAP

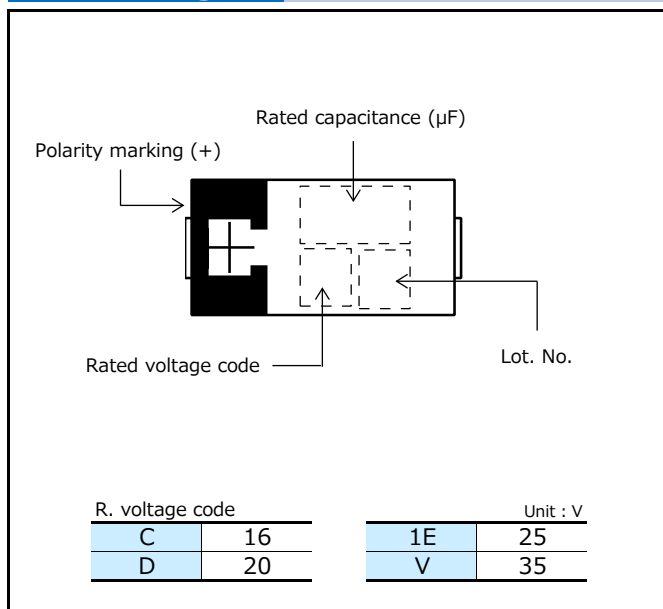
Features

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

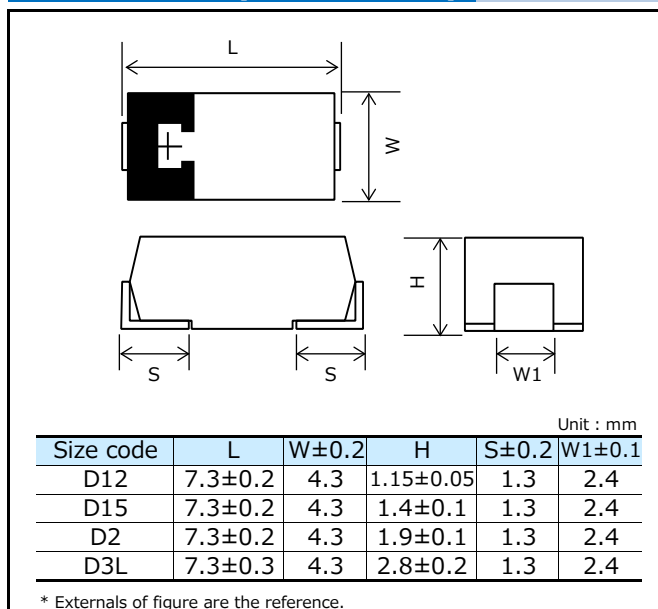
Specifications

Size code	D12	D15	D2	D3L
Category temp. range	-55 °C to +105 °C			
Rated volt. range	16 V	16 V to 25 V	16 V to 35 V	16 V to 25 V
Category volt. range	16 V	16 V to 25 V	16 V to 35 V	16 V to 25 V
Rated cap. range	33 μF	22 μF to 47 μF	10 μF to 150 μF	68 μF to 220 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)	Rated voltage × 1.15			
Endurance	+105 °C 2000 h rated voltage applied			
	Capacitance change	Within ±20 % of the initial value		
	Dissipation factor(tan δ)	≤ 1.5 times of the initial limit		
	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		
	Dissipation factor(tan δ)	≤ 1.5 times of the initial limit		
	Leakage current	≤ 3 times of the initial limit		

Marking



Dimensions (not to scale)



Characteristics list

Rated voltage (V)	Rated temperature (°C)	Category voltage (V)	Category temperature (°C)	Rated capacitance (μF)	Case size (mm)			Size code	Specifications				Standard		Floor life level	
					L	W	H		Ripple* ¹ current (mA rms)	ESR* ² (mΩ max.)	tan δ* ³	LC* ⁴ (μA)	Part number	Min. packaging qty (pcs)	Reflow temp ≤260°C	Reflow temp ≤250°C
16	105	16	105	33	7.3	4.3	1.15	D12	1800	40	0.10	52.8	16TQC33MYFS	4500	-	3
	105	16	105		7.3	4.3	1.9	D2	1400	70	0.10	52.8	16TQC33MYFD	3000		
	105	16	105	47	7.3	4.3	1.4	D15	1500	55	0.10	75.2	16TQC47MYFT	3000		
	105	16	105		7.3	4.3	1.9	D2	1800	40	0.10	75.2	16TQC47MW	3000		
	105	16	105		7.3	4.3	1.9		1450	55	0.10	75.2	16TQC47MYFD	3000		
	105	16	105		7.3	4.3	1.9		1500	50	0.10	108.8	16TQC68MYF	3000		
	105	16	105	68	7.3	4.3	1.9		1800	50	0.10	160.0	16TQC100MYF	3000		
	105	16	105	150	7.3	4.3	2.8	D3L	1800	50	0.10	240.0	16TQC150MYF	2500		
	105	16	105	150	7.3	4.3	1.9	D2	1500	70	0.15	240.0	1CTQC15173F1	3000		
	NEW 105	16	105	220	7.3	4.3	2.8	D3L	1750	50	0.10	352.0	16TQC220MD3	2500		
20	105	20	105	33	7.3	4.3	1.9	D2	1400	60	0.10	66.0	20TQC33MYFD	3000		
	105	20	105	47	7.3	4.3	1.9		1450	55	0.10	94.0	20TQC47MYF	3000		
	105	20	105		7.3	4.3	1.4	D15	1500	55	0.10	94.0	20TQC47MYFT	3000		
	105	20	105	100	7.3	4.3	1.9	D2	1250	100	0.15	200.0	20TQC100MD2	3000		
	105	20	105		7.3	4.3	2.8	D3L	1700	55	0.10	200.0	20TQC100MYF	2500		
25	105	25	105	15	7.3	4.3	1.9	D2	1500	45	0.10	38.0	25TQC15MV	3000		
	105	25	105		7.3	4.3	1.9		1000	90	0.10	38.0	25TQC15MYFD	3000		
	105	25	105	22	7.3	4.3	1.9		1500	45	0.10	55.0	25TQC22MV	3000		
	105	25	105		7.3	4.3	1.9		1400	60	0.10	55.0	25TQC22MYFD	3000		
	105	25	105		7.3	4.3	1.4	D15	1400	70	0.10	55.0	25TQC22MYFT	3000		
	105	25	105	33	7.3	4.3	1.9	D2	1400	60	0.10	82.5	25TQC33MYF	3000		
	105	25	105	68	7.3	4.3	2.8	D3L	1400	70	0.10	170.0	25TQC68MYF	2500		
	NEW 105	25	105	100	7.3	4.3	2.8		1600	60	0.10	250.0	25TQC100MD3	2500		
35	105	35	105	10	7.3	4.3	1.9	D2	1000	120	0.10	35.0	35TQC10M	3000		
	105	35	105		7.3	4.3	1.9		1000	120	0.10	35.0	35TQC10MYF	3000		
	105	35	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", "Taping specifications" and "Floor life level".

◆ Small order quantity (500 pcs/reel) is available with TQC series. Please contact our sales representative if you prefer it.