

## Surface Mount Type

Series : **TQ** Type : **V**  
**High temperature**  
**Lead-Free reflow (suffix : A\*)**



### Features

- 1 size smaller and same performance compare with V-TK series
- Low ESR (85 % low ESR in low temperature after endurance compare with V-TP series)
- Endurance : 125 °C 2000 h
- RoHS compliant

### Recommended applications

- Automotive

### Specifications

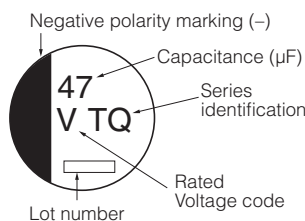
Category temperature range	-40 °C to +125 °C		
Rated voltage range	35 V.DC		
Capacitance range	47 µF to 100 µF		
Capacitance tolerance	±20 % (120 Hz/+20 °C)		
Leakage current	I ≤ 0.01 CV (µA) After 2 minutes		
Dissipation factor (tan δ)	Please see the attached characteristics list		
Endurance	After the life test with DC rated working voltage at +125 °C±2 °C for 2000 hours, the capacitors shall meet the limits specified below.		
	Capacitance change	Within ±30 % of the initial value	
	tan δ	≤300 % of the initial limit	
	DC leakage current	Within the initial limit	
	ESR after endurance (Ω/100kHz)		Size Code
Initial (+20 °C)			0.30
After 2000 h (-40 °C)			6
Shelf life	After storage for 1000 hours at +125 °C±2 °C with no voltage applied and then being stabilized at +20 °C, capacitors shall meet the limits specified in Endurance. (With voltage treatment)		
Resistance to soldering heat	After reflow soldering and then being stabilized at +20 °C, capacitors shall meet the following limits.		
	Capacitance change	Within ±10 % of the initial value	
	tan δ	Within the initial limit	
	DC leakage current	Within the initial limit	
AEC-Q200	AEC-Q200 compliant		

### Frequency correction factor for ripple current

Frequency (Hz)	120	1 k	10 k	100 k to
Correction factor	0.65	0.85	0.95	1.00

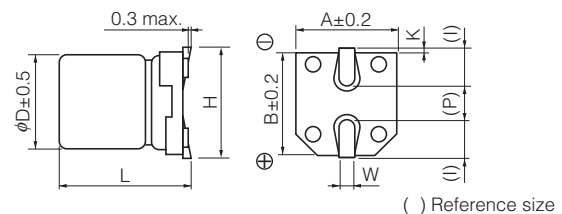
### Marking

Example : 35 V.DC 47 µF  
 Marking color : BLACK



R. Voltage (V.DC)	35
Code	V

### Dimensions



(Unit : mm)

Size code	φD	L	A, B	H	I	W	P	K
D8	6.3	7.7±0.3	6.6	7.8 max.	2.6	0.65±0.1	1.8	0.35 <sup>+0.15</sup> <sub>0.20</sub>

## Characteristics list

Endurance : 125 °C 2000 h

Rated voltage (V.DC)	Cap. (±20 %) (μF)	Case size (mm)		Size code	Specification			Part No.	Reflow	Min. Packaging Qty
		φD	L		Ripple current (100 kHz) (+125 °C) (mA r.m.s.)	ESR (100 kHz) (+20 °C) (Ω)	tan δ (120 Hz) (+20 °C)			Taping (pcs)
35	47	6.3	7.7	D8	197	0.30	0.16	EEETQV470XAP	(5)	900
	100	6.3	7.7	D8	197	0.30	0.16	EEETQV101XAP	(5)	900

If Part number exceeds 12 digits, voltage code is abbreviated as follows; 1V → V  
 · Please refer to the page of "Reflow Profile" and "The Taping Dimensions".