



## AEC-Q200

### Passive Components Selection Guide



**CAPACITORS**



**RESISTORS**

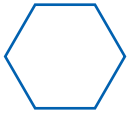


**CIRCUIT PROTECTION**

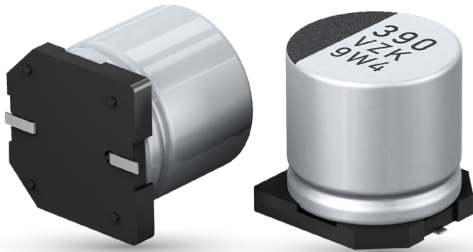


**INDUCTORS**





# CAPACITORS



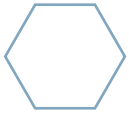
ALUMINUM ELECTROLYTIC CAPACITORS	
EEE - **A****	SMT, S Series, 85C 2000H
EEE - FC	SMT, FC Series, 105°C 1000H, Low Impedance
EEE/EEV-FK	SMT, FK Series, 105°C 2000 – 5000H, Low Impedance
EEE - FP	SMT, FP Series, 105°C 2000H, max. 50% lower ESR than FK Series
EEE - FK****Sx	SMT, FKS Series, 105°C 2000 - 5000H, Large capacitance
EEE - FT	SMT, FT Series, 105°C 2000 - 5000H, Low ESR in Miniaturized body
EEE - FH	SMT, FH series, 105°C 7000 - 10000h
EEE - HA	SMT, HA Series, 105°C 1000H
EEE - HB	SMT, HB Series, 105°C 2000H
EEE - HC	SMT, HC Series, 105°C, 3000 - 5000H
EEE - HD	SMT, HD Series, 105°C 5000H
EEE/EEV - TG	SMT, TG series, 125°C 1000 - 2000H
EEE - TK	SMT, TK series 125°C 3000H
EEE - TP	SMT, TP SERIES 125°C, 2000H, LOW ESR
EEE - TQ	SMT, TQ Series, 125°C 2000 – 3000H, Very low ESR
EEE - TC	SMT, TC Series, 125°C 2000 – 3000H, High ripple current
EEE - TCU	SMT, TCU Series, 125°C 3000H, max.40% smaller body than TC Series
EEU - FC	RADIAL, FC Series 105°C 1000 - 5000H, Low impedance
EEU - FK	RADIAL, FK Series 105°C 3000-5000H, Low impedance, miniaturized
EEU - FP	RADIAL, FP Series 105°C 4000-5000H, High ripple current, Large capacitance
EEU - TA	RADIAL TA SERIES, 125°C 2000H
EEU - TP	RADIAL TP SERIES, 125°C 2000-5000H, 135°C 1000-2000H

\*Anti-vibration variants of SMT type are available for diameter 6mm and above

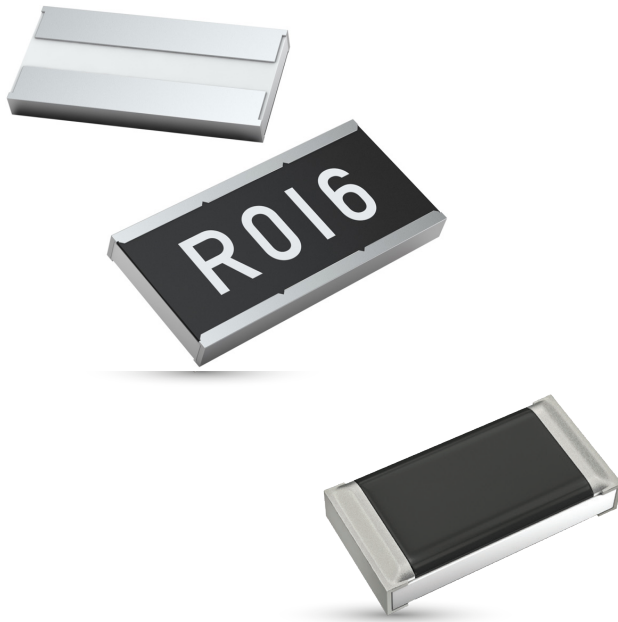
HYBRID CAPACITORS	
EEH - ZA	SMT/RADIAL ZA Series, 105°C 1,0000H
EEH - ZC	SMT/RADIAL ZC Series, 125°C 4000H
EEH - ZK	SMT/RADIAL ZK Series, 125°C 4000H
EEH - ZKU	SMT/RADIAL ZKU Series, 125°C 4000H Larger capacitance than ZK Series
EEH - ZT	SMT/RADIAL ZT Series, 125°C 4000H Higher ripple current than ZC Series
EEH - ZS	SMT/RADIAL ZS Series, 125°C 4000H, Large capacitance, High ripple current
EEH - ZSU	SMT/RADIAL ZSU Series, 125°C 4000H, Larger capacitance than ZS Series
EEH - ZU	SMT ZU Series, 125°C 4000H, Higher ripple current than ZS Series
EEH - ZE	SMT/RADIAL ZE Series, 145°C 2000H
EEH - ZF	SMT/RADIAL ZF Series, 150°C 1000H

\*Anti-vibration variants of SMT type are available for diameter 6mm and above

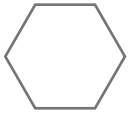
FILM CAPACITORS	
ECQUA	Metallized PP film capacitor, radial box, safety class X2, 110°C, ±10%, ±20%
ECWFG	Metallized PP film capacitor, radial box, PFC, 110°C, ±5%, ±10%
EZPV	Metallized PP film capacitor, radial box, DC-Link, 105°C, ±10%



# RESISTORS



SERIES	DESCRIPTION
ERA*A	Thin film – high reliability
ERA*V/K	Thin film – high stability and reliability
ERJS, ERJU, ERJUP except for ERJU0X/U01	Thick film – anti sulfur
ERJC	Thick film – anti sulfur & wide terminal
ERJPB	Thick film – high precision
ERJPA, ERJP0, ERJT, ERJPM8	Thick film – anti surge
ERJH*	Thick film – high temperature
ERJ*BQ/S, ERJ*RQ/S, ERJ6DQ/S, ERJ12ZQ/S	Thick film – low resistance
ERJ*BW	Thick film – low resistance – double-sided
ERJA, ERJB, ERJD	Thick film – low resistance – wide terminal
ERJ2G, ERJ2RK, ERJ2RH, ERJ2RCF, ERJ3G, ERJ3EK, ERJ3RB, ERJ3RE, ERJ6GE, ERJ6EN, ERJ6RB, ERJ6RE	Thick film – standard
ERJ8G, ERJ8ENF, ERJ1T, ERJ12, ERJ14	Thick film – standard (NRND)
ERJMS4	Metal plate



# CIRCUIT PROTECTION



## NTC THERMISTORS

ERT-J0*****M	NTC Thermistor, SMT, 0402
ERT-J1*****M	NTC Thermistor, SMT, 0603

## ZNR SURGE ABSORBERS

ERZ-HF2M220D	ZNR Surge Absorbers, SMT, 8.0x6.4x5.5mm
--------------	---

## MULTILAYER VARISTORS

EZJ-P0*****M	Multilayer Varistors, SMT, 0402
EZJ-P1*****M	Multilayer Varistors, SMT, 0603, -55~150°C
EZJ-Z1*****M	Multilayer Varistors, SMT, 0603, -55~125°C
EZJ-Z2Y390KM	Multilayer Varistors, SMT, 0805

## ESD SUPPRESSOR

EZAEG3W11AV	ESD suppressor – high withstand type
-------------	--------------------------------------



# INDUCTORS



PRODUCT SERIES	POWER CHOKE COILS FOR AUTOTMOVIE APPLICATIONS, METAL CORE TYPE; L X W X H (MAX HEIGHT)	
PCC-MC High Performance	ETQP3M***YFP	SMT, 5.5X5.0X3.0mm
	ETQP4M***YFP	SMT, 5.5X5.0X4.0mm
	ETQP3M***YFN	SMT, 6.5X6.0X3.0mm
	ETQP4M***YFN	SMT, 6.5X6.0X4.5mm
	ETQP5M***YGM	SMT, 7.5X7.0X5.0mm
	ETQP5M***YFM	SMT, 7.5X7.0X5.4mm
	ETQP5M***YGK	SMT, 8.5X8.0X5.0mm
	ETQP5M***YFK	SMT, 8.5X8.0X5.4mm
	ETQP5M***YGC	SMT, 10.7X10.0X5.0mm
	ETQP5M***YFC	SMT, 10.7X10.0X5.4mm
PCC-Low D.C.R	ETQP5M***YLC	SMT, 10.9X10.0X5.0mm
	ETQP6M***YLC	SMT, 10.9X10.0X6.0mm
PCC-LP Low Profile	ETQP3M***KVP	SMT, 5.5x5.0x3.0mm
	ETQP3M***KVN	SMT, 6.4X6.0X3.0mm
	ETQP4M***KVK	SMT, 8.5X8.0X4.0mm
	ETQP4M***KVC	SMT, 10.7X10.0X4.0mm
PCC-LE Less mounting space	ETQP4M***KFN	SMT, 6.5X6.0X4.8mm
	ETQP4M***KFM	SMT, 7.5X7.0X4.8mm
PCC-High Frequency, 5MHz	ETQP3M***HFP	SMT, 5.5X5.0X3.0mm
	ETQP3M***HFN	SMT, 6.5X6.0X3.0mm
PCC-High Vibration Resist	ETQP5M***YSK	SMT, 8.5x8.0x5.4mm
	ETQP5M***YSC	SMT, 10.7x10.0x5.4mm
PCC-Large Current	ETQP8M***JFA	SMT, 13.2x12.8x8.0mm
	ETQPAM***JFW	SMT, 17.2x15.6x10.5mm



# Panasonic

INDUSTRY

## Panasonic Industry Europe GmbH

Caroline-Herschel-Strasse 100  
85521 Ottobrunn  
Tel. 49 89 45354-1000  
[info.pieu@eu.panasonic.com](mailto:info.pieu@eu.panasonic.com)  
[industry.panasonic.eu](http://industry.panasonic.eu)