

Automotive Subsystems Matrix

Automotive Subsystem	MLCC*	MLCC (High Voltage)*	Polymers (KO-CAP®)**	Tantalum MnO ₂	Film EMI	Film Pulse	Film DC-Link	Film General Purpose	Aluminium Leaded	Aluminium Snap-In	Aluminium Surface Mount	Super-capacitor	AC Line Filter	EMI Core	Flex Suppressor	Power Inductor	Toroidal Coil	Varistor Series
Adaptive Headlights (Headlights)	COG, X7R, X8L, X8R	COG, X7R	T591, T598	T491, T495, T498, T499				F161, SMC, SPC						ESD		MPLCV		VA
Air Bag	COG, X7R		T591, T598	T491, T495						PEH526						MPLCV, MPCV	HHBC, PHBC	VA
Backup Camera (Rear Camera)	COG, X7R		T591, T598								A700			ESD	EFF4, FF1	MPLCV		VA
Batteries / Alternator-Rectifier	X7R				F161, RSB, R60				PEG(H)126, 127, 220, 225, 226								HHBC, PHBC	VA
Body Control Module	COG, X7R		T591, T598	T491, T495												MPLCV, MPCV		VA
CAN Controller	COG, X7R		T591, T598	T491, T495					EST, EAK, ETG, ETA, ESU; A750, A755, A758, A759		EXV, EDT; A765, A767					MPLCV		VA
Climate Control	COG, X7R			T491, T495									SC, SCR				HHBC, PHBC	VA
Cluster	COG, X7R			T491, T495					EST, EAK, ETG, ETA, ESU; A750, A755, A758, A759		EXV, EDT; A765, A767			ESD	EFF4, FF1	MPLCV		VA
Cooling Fan	COG, X7R, X8L, X8R			T491, T495, T498, T499				R60, R82, RSB, F5A, F5B, F5D; F161	PEG(H)126, 127, 220, 226, 225							MPLCV, MPCV	HHBC, PHBC	VM
Crash Avoidance / Lane Detection (Autonomous Driving)	COG, X7R		T591, T598	T491, T495							A700					MPLCV	HHBC, PHBC	VA
Direct Injection	COG, X7R, X8L, X8R			T491, T495, T498, T499					PEG(H)126, 220, 226, 225	PEH526						MPLCV, MPCV	HHBC, PHBC	VA
Door Switches	COG, X7R							R60, R82, RSB, F5A, F5B, F5D; F161										VA
Energy Recovery System (ERS) (Regenerative Braking) Fuel Pump	COG, X7R	COG, X7R		T491, T495	F862, R41, F5B, F5D	R74, R75			PEG(H)126, 220, 225, 226							MPLCV, MPCV	HHBC, PHBC	VA
Engine Control Unit	COG, X7R, X8L, X8R			T491, T495, T498, T499	F161, RSB, R60				PEG(H)126, 127, 220, 225, 226					ESD		MPLCV, MPCV		VA
Fuel Pump	COG, X7R							R60, R82, RSB, F5A, F5B, F5D; F161	PEG(H)126, 127, 220, 225, 226									VM
GPS	COG, X7R		T591, T598	T491, T495									FC, FE, FG, FR, FT		EFF4, FF1	MPLCV		VA
Infotainment Module (Audio)	COG, X7R, X5R		T591, T598	T491, T495					EST, EAK, ETG, ETA, ESU; A750, A755, A758, A759		EXV, EDT; A765, A767		FC, FE, FG, FR, FT	ESD	EFF4, FF1	MPLCV		VA
Interior Lighting	X7R		T591, T598	T491, T495												MPLCV		VA

*MLCCs available as standard and with Flex Mitigation options.

**KO-CAP® is a registered trademark of KEMET Corporation.

Automotive Subsystems Matrix

Automotive Subsystem	MLCC*	MLCC (High Voltage)*	Polymers (KO-CAP®)**	Tantalum MnO ₂	Film EMI	Film Pulse	Film DC-Link	Film General Purpose	Aluminium Leaded	Aluminium Snap-In	Aluminium Surface Mount	Super-capacitor	AC Line Filter	EMI Core	Flex Suppressor	Power Inductor	Toroidal Coil	Varistor Series
Inverter (Same and Onboard Charger)	COG, X7R	COG, X7R			F862, R41, F5B, F5D	R74, R75	C4EE, C4AE		DC Link: PEG(H)126, 220, 225, 226; Control: EST, EAK, ETG, ETA, ESU; A750, A755, A758, A759	DC Link: PEH526	Control: EXV, EDT; A765, A767		SC, SCR	ESD (CUSTOM)		MPLCV, MPCV	HHBC, PHBC, REACTOR	VA
O2 Sensor (Sensor)	COG, X7R, X8L, X8R																	VA
Power Seat Motors	X7R							R60, R82, RSB, F5A, F5B, F5D; F161								MPLCV		VM
Power Steering (and Steering Torque Control)	COG, X7R		T591, T598	T491, T495					PEG(H)126, 220, 225, 226; EST				SC, SCR, SRD			MPLCV, MPCV	HHBC, PHBC	VA
Power Window Motors	X7R							R60, R82, RSB, F5A, F5B, F5D; F161								MPLCV, MPCV		VM
Radar Sensor	COG, X7R		T591, T598	T491, T495							A700					MPLCV, MPCV		VA
Rear View Mirror	COG, X7R		T591, T598	T491, T495							A700			ESD	EFF4, FF1			VA
Remote Keyless Entry	COG, X7R														EFF4, FF1			VA
Speed Sensor (Sensor)	COG, X7R, X8L, X8R	COG, X7R																VA
Start / Stop Assist	COG, X7R								PEG(H)126, 220, 225, 226					ESD		CPI, MPLCV, MPCV		VA
Sunroof Motor	X7R							R60, R82, RSB, F5A, F5B, F5D; F161								MPLCV, MPCV		VM
Throttle Sensor (Sensor)	COG, X7R, X8L, X8R																	VA
TPMS (Remote Tire Pressure Monitoring)	COG, X7R			T489, T491, T495														VA
Traction Control (Electronic Stability / Antilock Brakes)	COG, X7R, X8L, X8R			T491, T495, T498, T499					PEG(H)126, 127, 220, 226, 225							MPLCV		VA
Transmission Control Unit (Clutch)	COG, X7R, X8L, X8R			T491, T495, T498, T499					PEG(H)126, 220, 226, 225	PEH526						MPLCV		VA
Water Pump Motor	X7R							R60, R82, RSB, F5A, F5B, F5D; F161	PEG(H)126, 127, 220, 226, 225							CPI, MPLCV, MPCV	HHBC, PHBC	VM
Wiper Motors	X7R							R60, R82, RSB, F5A, F5B, F5D; F161								MPLCV, MPCV		VM

*MLCCs available as standard and with Flex Mitigation options.

**KO-CAP® is a registered trademark of KEMET Corporation.