

BM2SCQ123T-EVK-001 Parts list

Part Reference	Qty.	Type	Value	Description	Part Number	Manufacture	Configuration mm (inch)
C1,C2,C3,C4,C5	5	Ceramic	2200pF	300Vac, ±20%, Y1	DE1E3RA222M4BP01F	Murata	-
C6,C7	2	Film	33nF	1600V, X7R, ±5%	B32672L1333J	TDK Epcos	-
C8,C9,C10	3	Electrolytic	100µF	450V, ±20%	450BXW100MEFR18X30	Rubycon	18mmΦX30mm
C11	1	Ceramic	1000pF	100V, X7R, ±20%	HMK107B7102MA-T	Taiyo Yuden	1608 (0603)
C12	1	Ceramic	47pF	250V, C0G, ±10%	GRM1885C2E470JW07	Murata	1608 (0603)
C13,C21	2	Ceramic	10µF	35V, X7R, ±20%	GMK316AB7106ML-TR	Taiyo Yuden	3216 (1206)
C14	1	Electrolytic	22µF	50V, Low-Z	UHD1H220MDD	Nichicon	5mmΦ x 11mm
C15	0	Ceramic	-	-	N.C.	-	3216 (1206)
C16	1	Ceramic	2200pF	1000V, X7R, ±10%	RDER73A222K2K1H03B	Murata	-
C17	1	Ceramic	680pF	1000V, X7R, ±10%	GRM31B5C2J681FW01L	Murata	3216 (1206)
C18,C19	2	Electrolytic	470µF	35V, Low-Z	UHD1V471MPD	Nichicon	10mmΦ x 20mm
C20	1	Electrolytic	220µF	35V, Low-Z	UHD1V221MPD	Nichicon	8mmΦ x 15mm
C22	1	Ceramic	0.1µF	100V, X7R, ±20%	HMK107B7104MA-T	Taiyo Yuden	1608 (0603)
CN1	1	Connector	3pin	9.52mm pitch	691 250 910 003	Wurth	-
CN2	1	Connector	3pin	6.35mm pitch	691 250 610 003	Wurth	-
CN3	1	Connector	2pin	5.0mm pitch	691 101 710 002	Wurth	-
D1,D2	2	RD	1A	1000V	1N4007GP	Vishay	DO-41
D3,D4	2	TVS	200V	-	1N6303A	Vishay	1.5KE
D5,D6	2	FRD	1A	1000V	UF4007	Vishay	DO-41
D7	1	RD	0.1A	80V	1SS355VM	ROHM	UMD2
D8	1	RD	0.2A	400V	RRE02VSM4S	ROHM	TUMD2SM
D9	1	FRD	20A	350V	RFUH25TB3SNZ	ROHM	TO-220
DB1	1	Bridge	45A	1600V	D45XT160-7000	Shindengen	-
HS1	1	Heat Sink	-	32.7°C/W	OSH-1525-SFL	Sankyo Thermotec	-
HS2	1	Heat Sink	-	22.9°C/W	IC-1625-STL	Sankyo Thermotec	-
-	2	Screw	-	M3L=8mm	SEMS-SCREW-P4-3X8	TOMOHO	-
IC1	1	AC/DC Converter	-	1700V	BM2SCQ123T-LBZ	ROHM	DIP7
IC2	1	Shunt Regulator	-	±0.5%	TL431BIDBZT	TI	SOT-23-3
L1,L2	2	Coil	1000µH	0.5A	768 772 102	Wurth	-
L3	1	Coil	2.2µH	4.3A	744 746 202 2	Wurth	-
PC1	1	Optocoupler	-	5kV	LTV-817M-B	LiteOn	DIP4
R1,R2,R3	3	Fuible Resistor	10Ω	2W, ±10%	PR02F50201009KR500	Vishay	-
R4,R5,R6,R7,R8,R9	6	Resistor	470kΩ	0.25W, ±5%	MCR18E2PJ474	ROHM	3216(1206)
R10,R11	2	Resistor	1MΩ	0.5W, ±5%	KTR18E2PJ105	ROHM	3216 (1206)
R12,R13	2	Resistor	470kΩ	0.5W, ±5%	KTR18E2PJ474	ROHM	3216 (1206)
R14	1	Resistor	0.47Ω	2W, ±1%	LTR100JZPFLR470	ROHM	6432 (2512)
R15	0	Resistor	-	-	N.C.	-	3216 (1206)
R16	1	Resistor	100kΩ	0.25W, ±1%	MCR18E2PF1003	ROHM	3216 (1206)
R17	1	Resistor	12kΩ	0.1W, ±1%	MCR03EZPFX1202	ROHM	1608 (0603)
R18	1	Resistor	10Ω	0.25W, ±5%	MCR18E2PJ100	ROHM	3216 (1206)
R19	1	Resistor	220kΩ	2W, ±5%	PR03000202203JAC00	Vishay	-
R20,R21	2	Resistor	10Ω	0.5W, ±5%	MCR25JZHJ100	ROHM	3225 (1210)
R22	1	Resistor	82kΩ	0.1W, ±1%	MCR03EZPFX8202	ROHM	1608 (0603)
R23	1	Resistor	4.7kΩ	0.1W, ±1%	MCR03EZPFX4701	ROHM	1608 (0603)
R24	1	Resistor	10kΩ	0.1W, ±1%	MCR03EZPFX1002	ROHM	1608 (0603)
R25	1	Resistor	2.2kΩ	0.1W, ±1%	MCR03EZPFX2201	ROHM	1608 (0603)
R26	1	Resistor	1kΩ	0.1W, ±1%	MCR03EZPFX1001	ROHM	1608 (0603)
R27	1	Resistor	10kΩ	0.1W, ±1%	MCR03EZPFX1002	ROHM	1608 (0603)
T1	1	Transformer	-	Bobin:FX2805_10 Core:EER28/28	XE2342Y	Alpha Trans	-
ZNR1, ZNR2, ZNR3	3	Varistor	-	750Vac, 1080Vmin, 100A	TMOV20RP750E	Littelfuse	20mmΦ Disc

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