BM2P016T-EVK-003 Parts list



Part Reference	Qty.	Туре	Value	Description	Part Number	Manufacture	Configuration mm (inch)
C1	1	X2 Capacitor	0.22µF	300Vac, ±20%	890 334 025 027 CS	Wurth	-
C2,C3,C4, C5	4	Y1 Capacitor	2200pF	Y1 capacitor	DE1E3RA222MJ4BP01F	Murata	-
C6	1	Electrolytic	100µF	450V, ±20%	450BXW100MEFR18X30	Rubycon	18mmΦX30mm
C7	1	Ceramic	47pF	1kV, X7R, ±10%	RDE5C3A470J2K1H03B	Murata	-
C8	0	-	-	25V, ±20%	-	-	-
C9	1	Ceramic	1000pF	100V, X7R, ±20%	HMK107B7102MA-T	Taiyo Yuden	1608 (0603)
C10,C14	2	Ceramic	10µF	35V, X7R, ±20%	GMK316AB7106ML-TR	Taiyo Yuden	3216 (1206)
C11	1	Ceramic	10nF	630V, X7R, ±10%	SMK316B7103KF-T	Taiyo Yuden	3216 (1206)
C12,C13	2	Electrolytic	1000µF	25V, ±20%	25ZLJ1000M10X20	Rubycon	10mmΦX20mm
C15	1	Ceramic	680pF	630V, C0G, ±10%	GRM31B5C2J681FW01L	Murata	3216 (1206)
C16	1	Ceramic	22nF	100V, X7R, ±10%	HMK107B7223KA-T	Taiyo Yuden	1608 (0603)
CN1	1	Connector	3pin	-	B3P-NV	JST	- ′
CN2	1	Connector	2pin	-	B2P-VH	JST	-
D1	1	FRD	0.8A	700V	RFN1LAM7S	ROHM	PMDTM
D2	1	RD	0.2A	400V	RRE02VSM4S	ROHM	TUMD2SM
D3	1	SBD	20A	100V	RB218T100NZ	ROHM	TO-220
D4	0	-	-	-	-	-	-
DB1	1	Bridge Diode	2A	600V	D2SBA60	Shindengen	SIP4
F1	1	Fuse	1.6A	300V	36911600000	Littelfuse	-
HS1,HS2	2	Heat Sink	-	22.9℃/W	IC-1625-STL	Sankyo Thermotec	-
-	2	Skrew	M3	M3	-	-	-
IC1	1	AC/DC Converter	-	650V	BM2P016T-Z	ROHM	TO-220-7
IC2	1	Shunt Regulator	-	-	TL431BIDBZT	TI	SOT-23-3
LF1	1	Line Filter	13mH	1A	XF1482Y	Alpha Trans	-
LF2	1	Line Filter	60µH	1A	LF1246Y	Alpha Trans	-
PC1	1	Optocoupler	-	5kV	LTV-817-B	LiteOn	DIP4
R1,R2,R3	3	Resistor	220kΩ	0.25W, ±5%	MCR18EZPJ224	ROHM	3216 (1206)
R4,R5	2	Resistor	0.47Ω	0.25W, ±1%	MCR18EZHFLR470	ROHM	3216 (1206)
R6	1	Resistor	10Ω	0.25W, ±5%	MCR18EZPJ100	ROHM	3216 (1206)
R7,R9	2	Resistor	10Ω	0.25W, ±5%	MCR18EZPJ100	ROHM	3216 (1206)
R8	1	Resistor	47kΩ	2W, ±2%	ERG2SJ473	Panasonic	- 1
R10	1	Resistor	33kΩ	0.1W, ±1%	MCR03EZPFX3302	ROHM	1608 (0603)
R11	1	Resistor	5.6kΩ	0.1W, ±1%	MCR03EZPFX5601	ROHM	1608 (0603)
R12,R15	2	Resistor	10kΩ	0.1W, ±1%	MCR03EZPFX1002	ROHM	1608 (0603)
R13,R14	2	Resistor	1kΩ	0.1W, ±5%	MCR03EZPJ102	ROHM	1608 (0603)
T1	1	Transformer	-	Bobin:EER2828-10pin Core:EER28/28	XE2236Y_B	Alpha Trans	-
ZNR1	1	Varistor	-	300Vac, 423Vmin, 400A	V470ZA05P	Littelfuse	-

Important Notes on the Use of Reference Designs

- 1) The contents of this document are subject to change without notice for the purpose of improvement.
- 2) ROHM provides reference designs (including, but not limited to, circuit diagrams, layout data, parts lists, reference boards and their evaluation results, etc.) and all materials related to evaluation boards (hereinafter collectively referred to as "Reference Designs, etc.") to customers for the purpose of referencing them in the development of devices, equipment, software, etc. incorporating ROHM products (hereinafter collectively referred to as "Customer Products"). The design, verification, etc. required for the development of the Customer's Product shall be done at the customer's responsibility and expense. In no event shall the customer use the Reference Designs, etc. for any purpose other than the purpose mentioned above.
- 3) Reference Designs, etc. are provided on an "as is" basis. ROHM disclaims all warranties, express or implied, including, but not limited to, warranties of usefulness, functionality, accuracy, merchantability, and fitness for a particular purpose. In no event shall ROHM be liable for any damages (including, but not limited to, lost profits or other incidental, consequential, or punitive damages) arising out of, related to or in connection with the use of or application of the Reference Designs, etc. whether in contract or tort. For the avoidance of doubt, ROHM does not warrant that the Reference Designs, etc. will work with the Customer's Product.
- 4) When using Reference Designs, etc. be sure to request and verify the latest specifications (including the specifications of the products that compose the Reference Design, etc.) separately.
- 5) The customer shall be responsible for implementing safety measures such as derating, redundant design, fire prevention, backup, and fail-safe measures, etc., to prevent personal injury, fire damage, etc., caused by the Customer's Product developed with Reference Designs, etc. ROHM assumes no liability whatsoever for any use in excess of the ratings or in case of failure to observe the instructions for use.
- 6) The application circuit examples, constants, and other information provided in Reference Designs, etc. are intended to illustrate standard operation and usage. Therefore, when designing for mass production, please take into account various external conditions.
- 7) Reference Designs, etc. are intended to show typical operations and examples of application circuits, etc., and do not constitute a license, express or implied, to implement or use any intellectual property rights or any other rights of ROHM or any other company. ROHM shall not be liable for any disputes arising from, related to or in connection with the use of the Reference Designs, etc.
- 8) Please make sure to contact ROHM and obtain ROHM's consent before using the Reference Designs, etc. for the following Customer's Product that requires particularly high reliability. Transportation equipment (in-vehicle, ship, railroad, etc.), trunk line communication equipment, traffic signal equipment, disaster and security equipment, safety equipment, medical equipment, servers, solar cells, power transmission systems, etc.
- 9) Do not use Reference Designs, etc. for the following Customer's Product that requires extremely high reliability. Aerospace equipment, nuclear power control equipment, submarine relay equipment, etc.
- 10) Do not use Reference Designs, etc. for military use, such as development of weapons of mass destruction, or for any other military purpose.
- 11) ROHM does not assume any liability for any accidents or damages caused by non- compliance with the descriptions in this document.
- 12) The information contained in this document has been carefully prepared to ensure accuracy. However, ROHM shall not be liable for any loss or damage incurred by customers due to errors or misprints in this document.
- 13) Do not reproduce or duplicate any part of this document in any form or by any means without ROHM's permission.



Thank you for your accessing to ROHM product informations. More detail product informations and catalogs are available, please contact us.

ROHM Customer Support System

http://www.rohm.com/contact/

R2109A www.rohm.com