Filename: TIDA-01509E1(CMB-Varistor-TVS)_BOM.xls

Variant: CMB-Varistor-TVS Generated: 04.12.2017 13:59:17

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Designator		Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
!PCB1	1		Printed Circuit Board		TIDA-01509	Any		
C1, C2, C3,	13	0.1uF	CAP, CERM, 0.1 μF, 50 V,+/- 10%, X7R, 0603	0603	GRM188R71H104KA93 D	MuRata		
C5_DI1, C5_DI2,					U			
C5_DI3,								
C5_DI4,								
C5_DI5,								
C5_DI6,								
C8_Ch7-8, C8_Ch9-10,								
C9_Ch7-8,								
C9_Ch9-10								
C4	1	2200pF	CAP, CERM, 2200 pF, 2000 V,+/- 10%, X7R, 1210	1210	202S41W222KV4E	Johanson Technology		
C6_DI1,	16	0.01uF	CAP, CERM, 0.01 µF, 50 V,+/- 10%, X7R, AEC-Q200	0402	CGA2B3X7R1H103K05			
C6_DI2,			Grade 1, 0402		0BB			
C6_DI3,								
C6_DI4,								
C6_DI5, C6_DI6,								
C7_DI1,								
C7_DI2,								
C7_DI3,								
C7_DI4,								
C7_DI5, C7_DI6,								
C10_Ch7-8,								
C10_Ch9-								
10,								
C11_Ch7-8,								
C11_Ch9- 10								
10								
D1, D3		Red	LED, Red, SMD	LED_0603	150060RS75000	Wurth Elektronik		
D2, D4 D5_DI1,	2 8	36V	Diode, TVS, Bi, 36 V, 64.3 Vc, SMB ChipGuard Automotive MLA Series Varistor ESD Clamp	SMB	SM6T36CA CGA0603MLA-31900E	STMicroelectronics Bourns		
D5_DI1, D5_DI2,	8		Protectors	1.6x0.8mm	CGAU603WLA-31900E	Bourns		
D5_DI6,			1100000					
D6_DI1,								
D6_DI2,								
D6_DI3, D9_Ch7-8,								
D9_C117-8, D11_Ch9-								
10								
D7_DI1,	16	Yellow	LED, Yellow, SMD	LED_0603	150060YS75000	Wurth Elektronik		
D7_DI2,								
D7_DI3, D7_DI4,								
D7_DI4, D7_DI5,								
D7_DI6,								
D8_DI1,								
D8_DI2,								
D8_DI3,								
D8_DI4, D8_DI5,								
D8_DI5, D8_DI6,								
D10_Ch7-8,								
D10_Ch9-								
10,								
D12_Ch7-8, D12_Ch9-								
10								
=:= · -:-						1.1/4		
FID1, FID2, FID3, FID4,	6		Fiducial mark. There is nothing to buy or mount.	N/A	N/A	N/A		
FID3, FID4, FID5, FID6								
J1, J2, J3,	4		Connector, Receptacle, 100mil, 10x1, Gold plated, TH	10x1 Receptacle	SSW-110-23-F-S	Samtec		
J4				·				
J5, J8	2		Header, 2.54mm, 10x1, Gold, TH	Header, 2.54mm,	61301011121	Wurth Elektronik		
J6, J9	2		Header, 3.81mm, 5x2, R/A, Tin, TH	10x1, TH Header, 3.81mm, 5x2,	601356310010P	Wurth Elektronik		
Jo, J9	2		Headel, 3.0 Hilli, 3x2, R/A, HR, TH	Header, 3.81mm, 5x2,	091300310010B	Waitii Elektionik		
J7, J10	2		Header, 2.54mm, 2x1, Tin, TH	Header, 2.54mm, 2x1,	0022284023	Molex		
				TH				
K1, K2	2		Relay, SPST-NO (1 Form A), 0.1 A, SMD	SOP-4	VO1400AEFTR	Vishay-Semiconductor		
LBL1	1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H	PCB Label 0.650 x 0.200 inch	THT-14-423-10	Brady		
R1, R5	2	100	10,000 per roll RES, 100, 1%, 0.1 W, 0603	0.200 inch 0603	CRCW0603100RFKEA	Vishay-Dale		
R2, R3		47	RES, 47, 5%, 0.1 W, 0603	0603	CRCW060347R0JNEA	Vishay-Dale Vishay-Dale		
R4, R6		0	RES, 0, 5%, 0.1 W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale	İ	

Designator								
R9_DI1,	Quantity 16	Value 2.4k	Description RES, 2.4 k, 2%, 1 W, AEC-Q200 Grade 0, 2.2x5.8mm	PackageReference 2.2x5.8mm	PartNumber CMB02070X2401GB200	Manufacturer Vishay/Beyschlag	Alternate PartNumber	Alternate Manufacturer
R9_DI2,		2	1126, 2.1 14, 276, 1 11, 7126 Q266 G1dd6 6, 2.2.16.6	Z.ZXO.O.IIII	0.11.50201071210103200	Violity/20/00/ling		
R9_DI3, R9_DI4,								
R9_DI5,								
R9_DI6,								
R11_DI1, R11_DI2,								
R11_DI3,								
R11_DI4, R11_DI5,								
R11_DI6,								
R15_Ch7-8, R15_Ch9-								
10,								
R18_Ch7-8,								
R18_Ch9- 10								
R10_DI1,	16	562	RES, 562, 1%, 0.063 W, 0402	0402	CRCW0402562RFKED	Vishay-Dale		
R10_DI2, R10_DI3,								
R10_DI4,								
R10_DI5, R10_DI6,								
R12_DI1,								
R12_DI2, R12_DI3,								
R12_DI4,								
R12_DI5,								
R12_DI6, R16_Ch7-8,								
R16_Ch9-								
10, R19_Ch7-8,								
R19_Ch9-								
10 R13_DI1,	16	750	RES, 750, 1%, 0.1 W, 0603	0603	CRCW0603750RFKEA	Vishay-Dale		
R13_DI2,								
R13_DI3, R13_DI4,								
R13_DI5,								
R13_DI6,								
R14_DI1, R14_DI2,								
R14_DI3,								
R14_DI4, R14_DI5,								
R14_DI6,								
R17_Ch7-8, R17_Ch9-								
10,								
R20_Ch7-8, R20_Ch9-								
10								
U1, U2 U3	1		Parallel-Load 8-Bit Shift Registers, D0016A, TUBE Single Inverter Gate, DBV0005A, LARGE T&R	D0016A DBV0005A	SN74LV165AD SN74LVC1GU04DBVR	Texas Instruments Texas Instruments	Equivalent	Texas Instruments
U4_DI3,	16		33V Precision Surge Protection Clamp, YZF0004-C01	YZF0004-C01	TVS3300YZFR	Texas Instruments	TVS3300YZFT	Texas Instruments
U4_DI4, U4_DI5,			(DSBGA-4)					
U6_DI3,								
U6_DI4,								
U6_DI5, U7_DI4,								
U7_DI5,								
U7_DI6,								
U8 DI4								
U8_DI4, U8_DI5,								
U8_DI5, U8_DI6,								
U8_DI5, U8_DI6, U10_Ch9- 10,								
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9-								
U8_DI5, U8_DI6, U10_Ch9- 10,								
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9- 10,								
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8	6		ISO1212DBQR, DBQ00016A, DBQ0016A (SSOP-16)	DBQ0016A	ISO1212DBQR	Texas Instruments	ISO1212DBQ	Texas Instruments
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8	6		ISO1212DBQR, DBQ00016A, DBQ0016A (SSOP-16)	DBQ0016A	ISO1212DBQR	Texas Instruments	ISO1212DBQ	Texas Instruments
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8	6		ISO1212DBQR, DBQ00016A, DBQ0016A (SSOP-16)	DBQ0016A	ISO1212DBQR	Texas Instruments	ISO1212DBQ	Texas Instruments
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8 U5_DI1, U5_DI2, U5_DI3, U5_DI4, U5_DI5,	6		ISO1212DBQR, DBQ00016A, DBQ0016A (SSOP-16)	DBQ0016A	ISO1212DBQR	Texas Instruments	ISO1212DBQ	Texas Instruments
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8 U5_DI1, U5_DI2, U5_DI3, U5_DI4, U5_DI5, U5_DI5, U5_DI6								
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8 U5_DI2, U5_DI2, U5_DI3, U5_DI5, U5_DI6, U5_DI5, U5_DI6, U9_Ch7-8, U9_Ch9-10,	6 4		ISO1212DBQR, DBQ00016A, DBQ0016A (SSOP-16) ISO1211DR, D0008B (SOIC-8)	DBQ0016A D0008B	ISO1212DBQR	Texas Instruments Texas Instruments	ISO1212DBQ	Texas Instruments Texas Instruments
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8 U5_DI1, U5_DI2, U5_DI3, U5_DI4, U5_DI5, U5_DI6 U9_Ch7-8, U9_Ch9-10, U12_Ch7-8,								
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8 U5_DI2, U5_DI2, U5_DI3, U5_DI5, U5_DI6, U5_DI5, U5_DI6, U9_Ch7-8, U9_Ch9-10,								
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8, U5_DI1, U5_DI2, U5_DI3, U5_DI4, U5_DI5, U5_DI6 U9_Ch7-8, U9_Ch9-10, U12_Ch7-8, U12_Ch9- 10	4		ISO1211DR, D0008B (SOIC-8)	D0008B	ISO1211DR	Texas Instruments		
U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8 U5_DI1, U5_DI2, U5_DI3, U5_DI6, U5_DI6, U9_Ch7-8, U9_Ch9-10, U12_Ch7-8, U12_Ch9- 10				D0008B	ISO1211DR			
U8_DI5, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8, U5_DI3, U5_DI4, U5_DI5, U5_DI6, U9_Ch7-8, U9_Ch7-8, U12_Ch7-8, U12_Ch9- 10 D5_DI3, D5_DI4, D5_DI5, D15_DI4, D5_DI5, D15_DI5, D15_DI4, D5_DI5, D15_DI5, D15_DI5, D15_DI5,	4		ISO1211DR, D0008B (SOIC-8) ChipGuard Automotive MLA Series Varistor ESD Clamp	D0008B	ISO1211DR	Texas Instruments		
U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8 U5_DI1, U5_DI2, U5_DI3, U5_DI6, U5_DI6, U9_Ch7-8, U9_Ch9-10, U12_Ch7-8, U12_Ch9- 10	4		ISO1211DR, D0008B (SOIC-8) ChipGuard Automotive MLA Series Varistor ESD Clamp	D0008B	ISO1211DR	Texas Instruments		
U8_DI6, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8, U5_DI2, U5_DI3, U5_DI6, U5_DI6, U9_Ch7-8, U9_Ch9-10, U12_Ch7-8, U12_Ch9- 10 D5_DI3, D5_DI4, D5_DI5, D6_DI4, D6_DI5, D6_DI5, D6_DI6, D6_DI6,	4		ISO1211DR, D0008B (SOIC-8) ChipGuard Automotive MLA Series Varistor ESD Clamp	D0008B	ISO1211DR	Texas Instruments		
U8_DI6, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8, U5_DI1, U5_DI2, U5_DI3, U5_DI4, U5_DI5, U5_DI6 U9_Ch7-8, U9_Ch9-10, U12_Ch9- 10 D5_DI3, D5_DI4, D5_DI5, D6_DI4, D6_DI5, D6_DI4, D6_DI5, D6_DI6, D9_Ch9-10,	4		ISO1211DR, D0008B (SOIC-8) ChipGuard Automotive MLA Series Varistor ESD Clamp	D0008B	ISO1211DR	Texas Instruments		
U8_DI6, U8_DI6, U10_Ch9- 10, U11_Ch9- 10, U13_Ch7-8, U14_Ch7-8, U5_DI2, U5_DI3, U5_DI6, U5_DI6, U9_Ch7-8, U9_Ch9-10, U12_Ch7-8, U12_Ch9- 10 D5_DI3, D5_DI4, D5_DI5, D6_DI4, D6_DI5, D6_DI5, D6_DI6, D6_DI6,	0	100	ISO1211DR, D0008B (SOIC-8) ChipGuard Automotive MLA Series Varistor ESD Clamp	D0008B	ISO1211DR	Texas Instruments Bourns		

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
		value		YZF0004-C01	TVS3300YZFR		TVS3300YZFT	
U4_DI1,	0			YZF0004-C01	1 V 53300 Y Z F R	Texas Instruments	1V53300YZF1	Texas Instruments
U4_DI2,			(DSBGA-4)					
U4_DI6,								
U6_DI1,								
U6_DI2,								
U6_DI6,								
U7_DI1,								
U7_DI2,								
U7_DI3,								
U8_DI1,								
U8_DI2,								
U8_DI3,								
U10_Ch7-8,								
U11_Ch7-8,								
U13_Ch9-								
10,								
U14_Ch9-								
10								

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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