



DESIGN KIT

WE-TVSP Power TVS Diodes High Power



SIZE:

DO-214AB
(SMCJ / SMDJ)

TECHNICAL DATA:

V_{DC}^*	5 – 48 V
I_{PEAK}^*	5.2 – 65.3 A
V_{CLAMP}^*	9.2 – 77.4 V
P_{DISS}^*	1500 / 3000 W
Polarity:	uni and bidirectional

Order Code 824 598
Version 1.0

Design Kit

WE-TVSP Power TVS Diodes High Power



1500 W / DO-214AB (SMCJ)	824 540 500		824 540 600		824 540 121	
	V_{DC}	5 V	V_{DC}	6 V	V_{DC}	12 V
	I_{PEAK}	163 A	I_{PEAK}	145.7 A	I_{PEAK}	75.4 A
	V_{CLAMP}	9.2 V	V_{CLAMP}	10.3 V	V_{CLAMP}	19.9 V
	824 540 241		824 540 261		824 540 301	
	V_{DC}	24 V	V_{DC}	26 V	V_{DC}	30 V
	I_{PEAK}	38.6 A	I_{PEAK}	35.7 A	I_{PEAK}	31 A
	V_{CLAMP}	38.9 V	V_{CLAMP}	42.1 V	V_{CLAMP}	48.4 V
	824 540 331		824 540 361		824 540 481	
	V_{DC}	33 V	V_{DC}	36 V	V_{DC}	48 V
I_{PEAK}	28.2 A	I_{PEAK}	25.9 A	I_{PEAK}	19.4 A	
V_{CLAMP}	53.3 V	V_{CLAMP}	58.1 V	V_{CLAMP}	77.4 V	
824 541 500		824 541 600		824 541 121		
V_{DC}	5 V	V_{DC}	6 V	V_{DC}	12 V	
I_{PEAK}	163 A	I_{PEAK}	145.7 A	I_{PEAK}	75.4 A	
V_{CLAMP}	9.2 V	V_{CLAMP}	10.3 V	V_{CLAMP}	19.9 V	
824 541 241		824 541 261		824 541 301		
V_{DC}	24 V	V_{DC}	26 V	V_{DC}	30 V	
I_{PEAK}	38.6 A	I_{PEAK}	35.7 A	I_{PEAK}	31 A	
V_{CLAMP}	38.9 V	V_{CLAMP}	42.1 V	V_{CLAMP}	48.4 V	
824 541 331		824 541 361		824 541 481		
V_{DC}	33 V	V_{DC}	36 V	V_{DC}	48 V	
I_{PEAK}	28.2 A	I_{PEAK}	25.9 A	I_{PEAK}	19.4 A	
V_{CLAMP}	53.3 V	V_{CLAMP}	58.1 V	V_{CLAMP}	77.4 V	
3000 W / DO-214AB (SMDJ)	824 550 500		824 550 600		824 550 121	
	V_{DC}	5 V	V_{DC}	6 V	V_{DC}	12 V
	I_{PEAK}	326.1 A	I_{PEAK}	291.3 A	I_{PEAK}	150.8 A
	V_{CLAMP}	9.2 V	V_{CLAMP}	10.3 V	V_{CLAMP}	19.9 V
	824 550 241		824 550 261		824 550 301	
	V_{DC}	24 V	V_{DC}	26 V	V_{DC}	30 V
	I_{PEAK}	77.1 A	I_{PEAK}	42.1 A	I_{PEAK}	62.0 A
	V_{CLAMP}	38.9 V	V_{CLAMP}	42.1 V	V_{CLAMP}	48.4 V
	824 550 331		824 550 361		824 550 481	
	V_{DC}	33 V	V_{DC}	36 V	V_{DC}	48 V
I_{PEAK}	56.3 A	I_{PEAK}	51.6 A	I_{PEAK}	38.8 A	
V_{CLAMP}	53.3 V	V_{CLAMP}	58.1 V	V_{CLAMP}	77.4 V	
824 551 500		824 551 600		824 551 121		
V_{DC}	5 V	V_{DC}	6 V	V_{DC}	12 V	
I_{PEAK}	326.1 A	I_{PEAK}	291.3 A	I_{PEAK}	150.8 A	
V_{CLAMP}	9.2 V	V_{CLAMP}	10.3 V	V_{CLAMP}	19.9 V	
824 551 241		824 551 261		824 551 301		
V_{DC}	24 V	V_{DC}	26 V	V_{DC}	30 V	
I_{PEAK}	77.1 A	I_{PEAK}	42.1 A	I_{PEAK}	62.0 A	
V_{CLAMP}	38.9 V	V_{CLAMP}	42.1 V	V_{CLAMP}	48.4 V	
824 551 331		824 551 361		824 551 481		
V_{DC}	33 V	V_{DC}	36 V	V_{DC}	48 V	
I_{PEAK}	56.3 A	I_{PEAK}	51.6 A	I_{PEAK}	38.8 A	
V_{CLAMP}	53.3 V	V_{CLAMP}	58.1 V	V_{CLAMP}	77.4 V	

Important information: Würth Elektronik's design kits contain reference components. These components correspond with the current product development status on the day of supply. Exchange of the reference components to components with up-to-date product development status is not carried out automatically. No liability is taken for the use of these reference components. Therefore, please request new samples prior to releases for series production and product release.

Please check datasheets on www.we-online.com for specifications.
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Characteristics

MSL Level 1 per J-STD-020
 Classification of the plastic case: UL 94 V-0
 Safety certification UL 497B, E478010
 Identical design:
 DO-214AC = SMAJ
 DO-214AA = SMBJ
 DO-214AB = SMCJ/SMDJ

Notes

I_{PEAK} @ 10/1000µs waveform
 P_{DISS} @ 10/1000µs waveform
 V_{CLAMP} @ I_{PEAK}

■ Unidirectional
 ■ Bidirectional