

Product Change Notification



Product Group: Diodes / May 09, 2018 / PCN-DD-009-2018 Rev 0

Matrix Leadframe Dual Gage Introduction and additional Halogen Free Mold Compound

DESCRIPTION OF CHANGE: Vishay Semiconductors announced the change from Single Row Dual Gauge to

Matrix Dual Gauge Lead-frame and the introduction of an additional Halogen Free mold compound on DPAK (TO-252AA) with PCN DD-016-2016 issued on

September 12th, 2016.

Implementation is now extended also to below Part Numbers that were not

included in previous notification.

CLASSIFICATION OF CHANGE: Assembly Process/Structure

Molding/Coating

REASON FOR CHANGE: Increase of manufacturing capacity and BOM consolidation for improved

manufacturing flexibility

EXPECTED INFLUENCE ON QUALITY/RELIABILITY/PERFORMANCE: There will be no effect on quality, reliability,

or electrical/thermal performances.

PRODUCT CATEGORY: Diodes & Rectifiers

PART NUMBERS/SERIES/FAMILIES AFFECTED:

Part number	Family
VS-8EWF10STR-M3	STANDARD DIODES
VS-8EWF10STRR-M3	STANDARD DIODES

VISHAY BRAND(s): Vishay Semiconductors

TIME SCHEDULE: After July 09, 2018 Vishay may start to implement the above changes on new

production

SAMPLE AVAILABILITY: Available on customer request

PRODUCT IDENTIFICATION: N/A

QUALIFICATION DATA: Qualification data is presented on page 3 of this PCN

ADDITIONAL DATA: POD drawing, dimensions and picture are presented from page 4 of this PCN

This PCN is considered approved, without further notification, unless we receive specific customer concerns before July 09, 2018 or as specified by contract.

ISSUED BY: STANDARD DIODES F.Modaro Vishay Diodes Product Marketing

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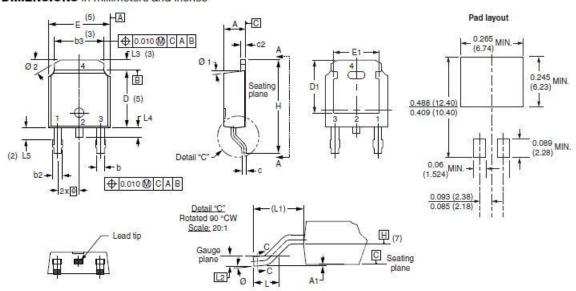
Qual Data: MATRIX LEADFRAME

STRESS	CONDITIONS	TEST POINTS	SAMPLES	FAIL	
HTRB	Tjmax	0		0/539	
	@100% rated	168	7 x 77		
	voltage	500	/ * / /	0/339	
	1000hrs	1000			
TC		0			
	-55°C/150°C	250	7 x 77	0/539	
	1000 cycles 500		/ * / /	0/339	
		1000		[
UHAST	130°C	0		0/539	
	85%RH	48	7 x 77		
	96hrs 96				
H3TRB	85°C 85%HR	0		0/539	
	@80% Vr	168	7 x 77		
	1000hrs	500	/ ^ / /		
	10001113	1000			
IOL	DT=100°C	0		0/539	
	1000Hrs	500	7 x 77		
	1000113	1000			

OUTLINE with STANDARD and MATRIX LEADFRAME

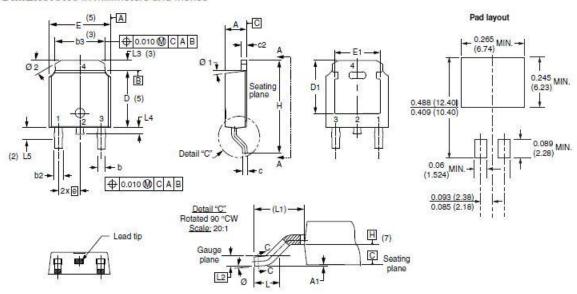
a) Standard:

DIMENSIONS in millimeters and inches



b) Matrix:

DIMENSIONS in millimeters and inches



DIMENSIONS

Both outline with Standard and Matrix Leadframe conform to JEDEC TO-252AA

SYMBOL	MILLIMETERS		INCHES		NOTES		EVMPOL	MILLIMETERS		INCHES		NOTES
	MIN.	MAX.	MIN.	MAX.	NOTES		SYMBOL	MIN.	MAX.	MIN.	MAX.	NOTES
Α	2.18	2.39	0.086	0.094		Ī	е	2.29 BSC		0.090 BSC		
A1	-	0.13	-	0.005		Ī	Н	9.40	10.41	0.370	0.410	
b	0.64	0.89	0.025	0.035		Ī	L	1.40	1.78	0.055	0.070	
b2	0.76	1.14	0.030	0.045			L1	2.74 BSC		0.108 REF.		
b3	4.95	5.46	0.195	0.215	3	Ī	L2	0.51 BSC		0.020 BSC		
С	0.46	0.61	0.018	0.024			L3	0.89	1.27	0.035	0.050	3
c2	0.46	0.89	0.018	0.035		Ī	L4	-	1.02	-	0.040	
D	5.97	6.22	0.235	0.245	5		L5	1.14	1.52	0.045	0.060	2
D1	5.21	-	0.205	-	3		Ø	0°	10°	0°	10°	
E	6.35	6.73	0.250	0.265	5		Ø1	0°	15°	0°	15°	
E1	4.32	-	0.170	-	3	Ī	Ø2	25°	35°	25°	35°	

Notes

- (1) Dimensioning and tolerancing as per ASME Y14.5M-1994
- (2) Lead dimension uncontrolled in L5
- $^{\mbox{\scriptsize (3)}}$ Dimension D1, E1, L3 and b3 establish a minimum mounting surface for thermal pad
- (4) Section C C dimension apply to the flat section of the lead between 0.13 and 0.25 mm (0.005 and 0.10") from the lead tip
- (5) Dimension D, and E do not include mold flash. Mold flash shall not exceed 0.127 mm (0.005") per side. These dimensions are measured at the outermost extremes of the plastic body
- (6) Dimension b1 and c1 applied to base metal only
- (7) Datum A and B to be determined at datum plane H
- (8) Outline conforms to JEDEC® outline TO-252AA