



## Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH)

Dear customer,

the Vishay Aluminum Capacitor and Energy Storage part numbers / series as listed in the Annex do **NOT** contain any of the total of **233 substances** of the REACH Candidate List of Substances of Very High Concern (SVHC) in more than 0.1 % wt/wt as defined by the REACH Directive:

as published in ECHA/PR/08/38 of October 28, 2008;  
and as published in ECHA/PR/10/01 of January 13, 2010;  
and as published in ECHA/PR/10/05 of March 30, 2010;  
and as published in ECHA/PR/10/12 of June 18, 2010;  
and as published in ECHA/PR/10/26 of December 15, 2010;  
and as published in ECHA/PR/11/15 of June 20, 2011;  
and as published in ECHA/PR/11/26 of December 19, 2011;  
and as published in ECHA/PR/12/16 of June 18, 2012;  
and as published in ECHA/PR/12/39 of December 19, 2012;  
and as published in ECHA/PR/13/26 of June 20, 2013;  
and as published in ECHA/PR/13/40 of December 16, 2013;  
and as published in ECHA/PR/14/11 of June 16, 2014;  
and as published in ECHA/PR/14/18 of December 17, 2014;  
and as published in ECHA/PR/15/09 of June 15, 2015;  
and as published in ECHA/PR/15/18 of December 17, 2015;  
and as published in ECHA/PR/16/07 of June 20, 2016;  
and as published in ECHA/PR/17/02 of January 12, 2017;  
and as published in ECHA/PR/17/14 of July 10, 2017;  
and as published in ECHA/PR/18/01 of January 15, 2018;  
and as published in ECHA/PR/18/11 of June 27, 2018;  
and as published in ECHA/PR/19/01 of January 15, 2019;  
and as published in ECHA/PR/19/12 of July 16, 2019;  
and as published in ECHA/PR/20/02 of January 16, 2020;  
and as published in ECHA/PR/20/05 of June 25, 2020;  
and as published in ECHA/NR/21/05 of January 19, 2021;  
and as published in ECHA/NR/21/20 of July 8, 2021;  
and as published in ECHA/NR/22/01 of January 17, 2022;  
and as published in ECHA/NR/22/12 of June 10, 2022;  
and as published in ECHA/NR/23/02 of January 17, 2023.

<http://echa.europa.eu/web/guest/candidate-list-table>

The Vishay Aluminum Capacitor part numbers / series as listed in the Annex also do NOT contain any of the substances of the REACH Authorization List in the REACH Directive Annex XIV and of the REACH Restriction List in the REACH Directive Annex XVII.

This data is accurate to the best of our knowledge.

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REACH, RoHS, and Hazardous Substances Coordinator Aluminum Capacitors Division



ANNEX

VISHAY BCCOMPONENTS	
SERIES	REACH-233 COMPLIANT PART NUMBER
Radial	MAL2013xxxxE3
	MAL2036xxxxE3
	MAL2038xxxxE3
	MAL2046xxxxE3
	MAL2047xxxxE3
	MAL2048xxxxE3
	MAL2097xxxxE3
	MAL2116xxxxE3
	MAL2134xxxxE3
	MAL2136xxxxE3
	MAL2140xxxxE3
	MAL2142xxxxE3
	MAL2146xxxxE3
	MAL2148xxxxE3
	MAL2150xxxxE3
	MAL2151xxxxE3
	MAL2152xxxxE3
	MAL2160xxxxE3
	MAL2170xxxxE3
	MAL2172xxxxE3
MAL2190xxxxE3	
MAL2246xxxxE3	
MAL2250xxxxE3	
MAL2260xxxxE3	
MAL2021xxxxE3	
MAL2030xxxxE3	
MAL2031xxxxE3	
MAL2041xxxxE3	
MAL2042xxxxE3	
MAL2043xxxxE3	
MAL2118xxxxE3	
MAL2119xxxxE3	
MAL2120xxxxE3	
MAL2125xxxxE3	
MAL2126xxxxE3	
MAL2132xxxxE3	
MAL2133xxxxE3	
MAL2138xxxxE3	
MAL2139xxxxE3	
MAL214095xxxE3, 97xxxE3, 99xxxE3	
MAL214699xxxE3	
MAL215095xxxE3, 97xxxE3, 99xxxE3	
MAL215299xxxE3	
MAL21536xxxxE3	
MAL21537xxxxE3	
MAL216099xxxE3	
MAL218097xxxE3	
MAL218197xxxE3	
MAL2182xxxxE3	
MAL2183xxxxE3	
MAL2184xxxxE3	
MAL2185xxxxE3	
MAL2186xxxxE3	
MAL219299xxxE3	
MAL2246xxxxE3	
MAL2250xxxxE3	
MAL2260xxxxE3	
MAL214095xxxE3, 97xxxE3, 99xxxE3	
MAL214699xxxE3	
MAL215095xxxE3, 97xxxE3, 99xxxE3	
MAL215299xxxE3	
MAL21536xxxxE3	
MAL21537xxxxE3	
MAL216099xxxE3	
MAL218097xxxE3	
MAL218197xxxE3	
MAL2182xxxxE3	
MAL2183xxxxE3	
MAL2184xxxxE3	
MAL2185xxxxE3	
MAL2186xxxxE3	
MAL219299xxxE3	
MAL2246xxxxE3	
MAL2250xxxxE3	
MAL2260xxxxE3	



VISHAY BCCOMPONENTS	
SERIES	REACH-233 COMPLIANT PART NUMBER
SI, PW, and SL	MAL2050xxxxE3
	MAL2051xxxxE3
	MAL2052xxxxE3
	MAL2053xxxxE3
	MAL2056xxxxE3
	MAL2057xxxxE3
	MAL2058xxxxE3
	MAL2059xxxxE3
	MAL2090xxxxE3
	MAL2093xxxxE3
	MAL2094xxxxE3
	MAL2095xxxxE3
	MAL2096xxxxE3
	MAL2156xxxxE3
	MAL2157xxxxE3
	MAL2158xxxxE3
	MAL2159xxxxE3
	MAL2162xxxxE3
	MAL2163xxxxE3
	MAL2193xxxxE3
MAL2198xxxxE3	
MAL2199xxxxE3	
MAL2256xxxxE3	
MAL2257xxxxE3	
MAL2259xxxxE3	
MAL2299xxxxE3	
ST	MAL2101xxxxE3
	MAL2102xxxxE3
	MAL2103xxxxE3
	MAL2104xxxxE3
	MAL2106xxxxE3
	MAL2110xxxxE3
	MAL2202xxxxE3
	MAL2500xxxxE3
MAL2501xxxxE3	
Double layer capacitors	MAL2196xxxxE3
	MAL2220xxxxE3
	MAL2225xxxxE3
	MAL2230xxxxE3
MAL2235xxxxE3	
Accessories (clamps, cap nuts, washers)	MAL8043055xxE3
	MAL804313001E3
	MAL8043240xxE3
	MAL804323321E3
MAL804324921E3	



VISHAY SPRAGUE	
SERIES	REACH-233 COMPLIANT PART NUMBER
Axial	34D (+ suffix "E3") <sup>(1)</sup>
	39D (+ suffix "E3") <sup>(1)</sup>
	53D (+ suffix "E3") <sup>(1)</sup>
Radial	515D (all PNs)
	517D (all PNs)
	757D (all PNs)
SI	80D (all PNs)
ST	36D (all PNs)
	36DX (all PNs)
	36DE (all PNs)
	36DY (all PNs)

**Note**

<sup>(1)</sup> **IMPORTANT:** affected are only part numbers with suffix "E3". Example: 39D907G003EJ6E3  
(part numbers without suffix "E3" contain lead (Pb). Consequently, these PNs are incompliant to REACH-191 directive and above)

VISHAY ROEDERSTEIN	
SERIES	REACH-233 COMPLIANT PART NUMBER
Radial	MALREKA and EKA (all PNs)
	MALREKB and EKB (all PNs)
	MALREKC and EKC (all PNs)
	MALREKE and EKE (all PNs)
	MALREKV and EKV (all PNs)
SMD	MALSECA and ECA (all PNs)
	MALSECL and ECL (all PNs)
	MALSECV and ECV (all PNs)

VISHAY OS-CON	
SERIES	REACH-233 COMPLIANT PART NUMBER
SMD	94SVP (all PNs)
	94SVPD (all PNs)