

INTRODUCTION

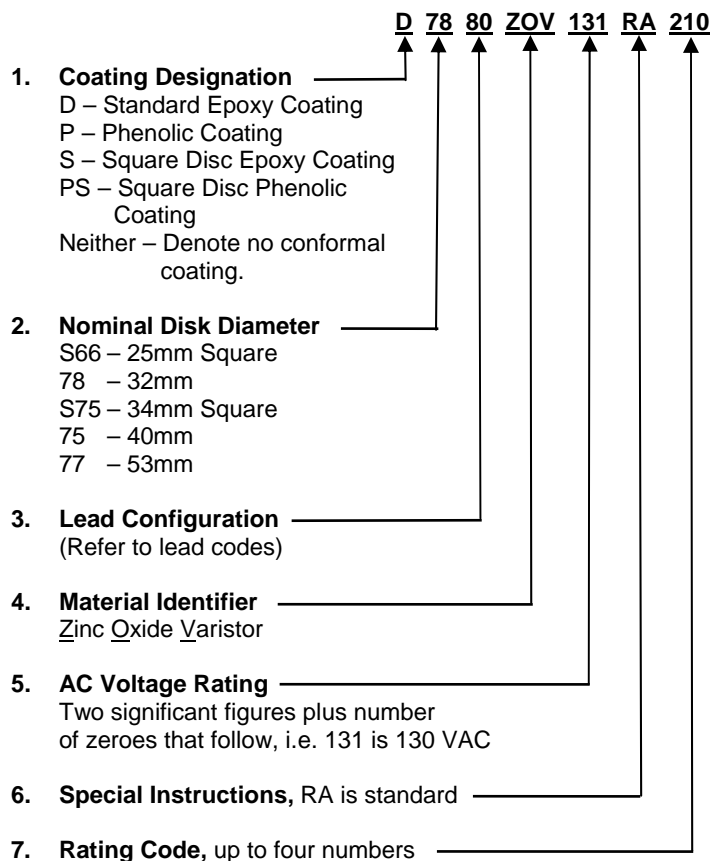
The High Energy Series is our large tab-leaded and wire-leaded varistors. They are available in round and square shapes. These varistors are available in 25mm, 32mm, 34mm, 40mm, and 53mm configurations including single and dual discs. They are available with maximum continuous operating voltages (MCOV) ranging from 130VAC to 1000VAC (up to 1500VAC upon request).

The High Energy Series is designed for pulse repetition and/or very large surge current environments. Numerous tab forms are available for all sizes.

STYLE DESIGNATION

The Maida Style Number is the typical means to identify our components when ordered. The style number identifies several parameters that are important for the characteristics of the device. An alternative ordering method, if known, is by our Item Number.

The following example is the standard part numbering system when ordering our High Energy Series components by the Maida Style Number:



STANDARD MARKING

Minimum marking shall consist of an abbreviated style designation and, when space is available, the manufacturer's initials or company logo.

Example

MDC

Z131

210UL

Where:

MDC - Company Initials

Z - Zinc Oxide Varistor

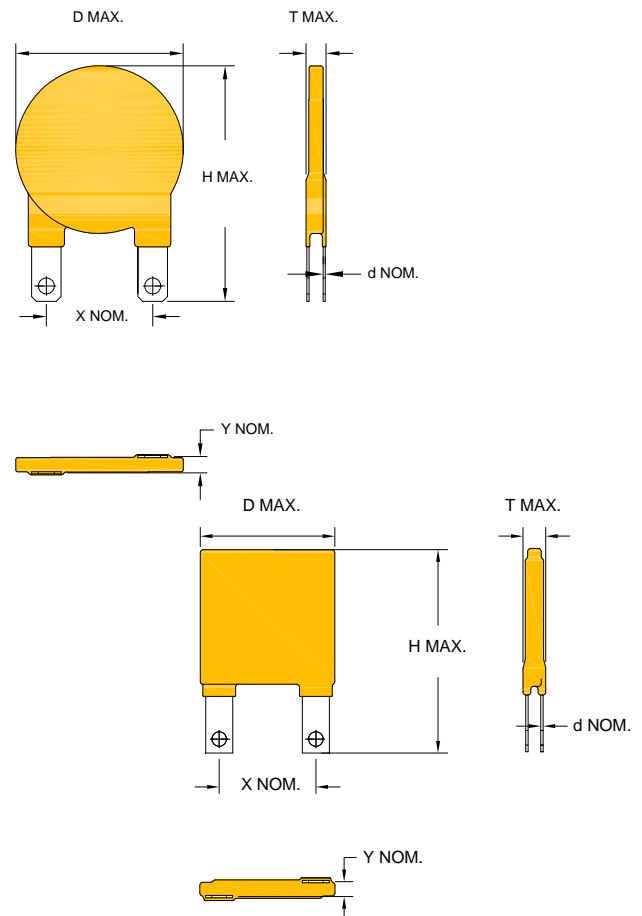
131 - AC Voltage rating (130VAC)

210 - Rating code

UL - UL recognition, if applicable

A manufacturing date code and/or special markings are available upon request.

Other safety agency designations are included where applicable.



130VAC thru 320VAC VARISTORS

Maida Style Number	MAX. Diameter (D) (in)	MAX. Thickness (T) (in)	MAX. Height (H) (in)	Typical X Dimension (in)	Typical X Tolerance (in)	Typical Y Dimension (in)	Typical Y Tolerance (in)	Typical Z Dimension (in)	Typical Z Tolerance (in)	Typical Wire Diameter (d) (in)
S6680ZOV131RA180	1.142	0.248	1.970	1.000	0.020	0.122	0.040	N/A	N/A	0.020
D7880ZOV131RA210	1.575	0.248	2.213	1.000	0.020	0.122	0.040	N/A	N/A	0.020
S7580ZOV131RA310	1.476	0.248	2.225	1.000	0.020	0.122	0.040	N/A	N/A	0.020
D7580ZOV131RA310	1.890	0.248	2.370	1.000	0.020	0.122	0.040	N/A	N/A	0.020
D7780ZOV131RA490	2.400	0.248	3.075	1.000	0.020	0.125	0.040	N/A	N/A	0.020
S6680ZOV141RA190	1.142	0.252	1.970	1.000	0.020	0.126	0.040	N/A	N/A	0.020
D7880ZOV141RA225	1.575	0.252	2.213	1.000	0.020	0.126	0.040	N/A	N/A	0.020
S7580ZOV141RA330	1.476	0.252	2.225	1.000	0.020	0.126	0.040	N/A	N/A	0.020
D7580ZOV141RA330	1.890	0.252	2.370	1.000	0.020	0.126	0.040	N/A	N/A	0.020
D7780ZOV141RA530	2.400	0.252	3.075	1.000	0.020	0.129	0.040	N/A	N/A	0.020
S6680ZOV151RA200	1.142	0.257	1.970	1.000	0.020	0.131	0.040	N/A	N/A	0.020
D7880ZOV151RA240	1.575	0.257	2.213	1.000	0.020	0.131	0.040	N/A	N/A	0.020
S7580ZOV151RA360	1.476	0.257	2.225	1.000	0.020	0.132	0.040	N/A	N/A	0.020
D7580ZOV151RA360	1.890	0.257	2.370	1.000	0.020	0.132	0.040	N/A	N/A	0.020
D7780ZOV151RA570	2.400	0.257	3.075	1.000	0.020	0.135	0.040	N/A	N/A	0.020
S6680ZOV181RA250	1.142	0.267	1.970	1.000	0.020	0.120	0.040	N/A	N/A	0.020
D7880ZOV181RA250	1.575	0.267	2.213	1.000	0.020	0.120	0.040	N/A	N/A	0.020
S7580ZOV181RA390	1.476	0.267	2.225	1.000	0.020	0.120	0.040	N/A	N/A	0.020
D7580ZOV181RA390	1.890	0.267	2.370	1.000	0.020	0.120	0.040	N/A	N/A	0.020
D7780ZOV181RA630	2.400	0.267	3.075	1.000	0.020	0.122	0.040	N/A	N/A	0.020
S6680ZOV211RA270	1.142	0.275	1.970	1.000	0.020	0.128	0.040	N/A	N/A	0.020
D7880ZOV211RA360	1.575	0.275	2.213	1.000	0.020	0.128	0.040	N/A	N/A	0.020
S7580ZOV211RA430	1.476	0.275	2.225	1.000	0.020	0.129	0.040	N/A	N/A	0.020
D7580ZOV211RA430	1.890	0.275	2.370	1.000	0.020	0.129	0.040	N/A	N/A	0.020
D7780ZOV211RA700	2.400	0.275	3.075	1.000	0.020	0.132	0.040	N/A	N/A	0.020
S6680ZOV231RA290	1.142	0.280	1.970	1.000	0.020	0.134	0.040	N/A	N/A	0.020
D7880ZOV231RA300	1.575	0.280	2.213	1.000	0.020	0.134	0.040	N/A	N/A	0.020
S7580ZOV231RA460	1.476	0.280	2.225	1.000	0.020	0.135	0.040	N/A	N/A	0.020
D7580ZOV231RA460	1.890	0.280	2.370	1.000	0.020	0.135	0.040	N/A	N/A	0.020
D7780ZOV231RA730	2.400	0.280	3.075	1.000	0.020	0.137	0.040	N/A	N/A	0.020
S6680ZOV251RA310	1.142	0.287	1.970	1.000	0.020	0.139	0.040	N/A	N/A	0.020
D7880ZOV251RA330	1.575	0.287	2.213	1.000	0.020	0.139	0.040	N/A	N/A	0.020
S7580ZOV251RA490	1.476	0.287	2.225	1.000	0.020	0.140	0.040	N/A	N/A	0.020
D7580ZOV251RA490	1.890	0.287	2.370	1.000	0.020	0.140	0.040	N/A	N/A	0.020
D7780ZOV251RA800	2.400	0.287	3.075	1.000	0.020	0.143	0.040	N/A	N/A	0.020
S6680ZOV271RA330	1.142	0.294	1.970	1.000	0.020	0.144	0.040	N/A	N/A	0.020
D7880ZOV271RA360	1.575	0.294	2.213	1.000	0.020	0.144	0.040	N/A	N/A	0.020
S7580ZOV271RA550	1.476	0.294	2.225	1.000	0.020	0.146	0.040	N/A	N/A	0.020
D7580ZOV271RA550	1.890	0.294	2.370	1.000	0.020	0.146	0.040	N/A	N/A	0.020
D7780ZOV271RA860	2.400	0.294	3.075	1.000	0.020	0.149	0.040	N/A	N/A	0.020
S6680ZOV301RA350	1.142	0.305	1.970	1.000	0.020	0.153	0.040	N/A	N/A	0.020
D7880ZOV301RA380	1.575	0.305	2.213	1.000	0.020	0.153	0.040	N/A	N/A	0.020
S7580ZOV301RA600	1.476	0.305	2.225	1.000	0.020	0.155	0.040	N/A	N/A	0.020
D7580ZOV301RA600	1.890	0.305	2.370	1.000	0.020	0.155	0.040	N/A	N/A	0.020
D7780ZOV301RA940	2.400	0.305	3.075	1.000	0.020	0.158	0.040	N/A	N/A	0.020
S6680ZOV321RA360	1.142	0.310	1.970	1.000	0.020	0.158	0.040	N/A	N/A	0.020
D7880ZOV321RA430	1.575	0.312	2.213	1.000	0.020	0.159	0.040	N/A	N/A	0.020
S7580ZOV321RA640	1.476	0.312	2.225	1.000	0.020	0.160	0.040	N/A	N/A	0.020
D7580ZOV321RA640	1.890	0.312	2.370	1.000	0.020	0.161	0.040	N/A	N/A	0.020
D7780ZOV321RA1000	2.400	0.312	3.075	1.000	0.020	0.161	0.040	N/A	N/A	0.020

NOTE: Alternate dimensional specifications, including lead styles, for any part listed may be available upon request. Please contact us for any inquiries.

340VAC thru 620VAC VARISTORS

Maida Style Number	MAX. Diameter (D) (in)	MAX. Thickness (T) (in)	MAX. Height (H) (in)	Typical X Dimension (in)	Typical X Tolerance (in)	Typical Y Dimension (in)	Typical Y Tolerance (in)	Typical Z Dimension (in)	Typical Z Tolerance (in)	Typical Wire Diameter (d) (in)
S6680ZOV341RA365	1.142	0.312	1.970	1.000	0.020	0.164	0.040	N/A	N/A	0.020
D7880ZOV341RA500	1.575	0.312	2.213	1.000	0.020	0.164	0.040	N/A	N/A	0.020
S7580ZOV341RA685	1.476	0.312	2.225	1.000	0.020	0.167	0.040	N/A	N/A	0.020
D7580ZOV341RA685	1.890	0.312	2.370	1.000	0.020	0.167	0.040	N/A	N/A	0.020
D7780ZOV341RA1140	2.400	0.312	3.075	1.000	0.020	0.167	0.040	N/A	N/A	0.020
S6680ZOV361RA370	1.142	0.318	1.970	1.000	0.020	0.173	0.040	N/A	N/A	0.020
D7880ZOV361RA530	1.575	0.318	2.213	1.000	0.020	0.173	0.040	N/A	N/A	0.020
S7580ZOV361RA710	1.476	0.318	2.225	1.000	0.020	0.175	0.040	N/A	N/A	0.020
D7580ZOV361RA710	1.890	0.318	2.370	1.000	0.020	0.175	0.040	N/A	N/A	0.020
D7780ZOV361RA1180	2.400	0.318	3.075	1.000	0.020	0.175	0.040	N/A	N/A	0.020
S6680ZOV391RA380	1.142	0.325	1.970	1.000	0.020	0.178	0.040	N/A	N/A	0.020
D7880ZOV391RA550	1.575	0.312	2.213	1.000	0.020	0.178	0.040	N/A	N/A	0.020
S7580ZOV391RA800	1.476	0.312	2.225	1.000	0.020	0.180	0.040	N/A	N/A	0.020
D7580ZOV391RA800	1.890	0.312	2.370	1.000	0.020	0.180	0.040	N/A	N/A	0.020
D7780ZOV391RA1200	2.400	0.312	3.075	1.000	0.020	0.181	0.040	N/A	N/A	0.020
S6680ZOV421RA390	1.142	0.332	1.970	1.000	0.020	0.187	0.040	N/A	N/A	0.020
D7880ZOV421RA600	1.575	0.332	2.213	1.000	0.020	0.187	0.040	N/A	N/A	0.020
S7580ZOV421RA910	1.476	0.332	2.225	1.000	0.020	0.189	0.040	N/A	N/A	0.020
D7580ZOV421RA910	1.890	0.332	2.370	1.000	0.020	0.189	0.040	N/A	N/A	0.020
D7780ZOV421RA1500	2.400	0.332	3.075	1.000	0.020	0.190	0.040	N/A	N/A	0.020
S6680ZOV461RA430	1.142	0.344	1.970	1.000	0.020	0.198	0.040	N/A	N/A	0.020
D7880ZOV461RA520	1.575	0.344	2.213	1.000	0.020	0.198	0.040	N/A	N/A	0.020
S7580ZOV461RA780	1.476	0.344	2.225	1.000	0.020	0.200	0.040	N/A	N/A	0.020
D7580ZOV461RA780	1.890	0.344	2.370	1.000	0.020	0.200	0.040	N/A	N/A	0.020
D7780ZOV461RA1200	2.400	0.344	3.075	1.000	0.020	0.201	0.040	N/A	N/A	0.020
S6680ZOV481RA440	1.142	0.350	1.970	1.000	0.020	0.203	0.040	N/A	N/A	0.020
D7880ZOV481RA550	1.575	0.350	2.213	1.000	0.020	0.203	0.040	N/A	N/A	0.020
S7580ZOV481RA820	1.476	0.350	2.225	1.000	0.020	0.205	0.040	N/A	N/A	0.020
D7580ZOV481RA820	1.890	0.350	2.370	1.000	0.020	0.205	0.040	N/A	N/A	0.020
D7780ZOV481RA1250	2.400	0.350	3.075	1.000	0.020	0.206	0.040	N/A	N/A	0.020
S6680ZOV511RA450	1.142	0.360	1.970	1.000	0.020	0.212	0.040	N/A	N/A	0.020
D7880ZOV511RA580	1.575	0.360	2.213	1.000	0.020	0.212	0.040	N/A	N/A	0.020
S7580ZOV511RA900	1.476	0.360	2.225	1.000	0.020	0.214	0.040	N/A	N/A	0.020
D7580ZOV511RA900	1.890	0.360	2.370	1.000	0.020	0.214	0.040	N/A	N/A	0.020
D7780ZOV511RA1400	2.400	0.360	3.075	1.000	0.020	0.215	0.040	N/A	N/A	0.020
S6680ZOV551RA480	1.142	0.373	1.970	1.000	0.020	0.222	0.040	N/A	N/A	0.020
D7880ZOV551RA620	1.575	0.373	2.213	1.000	0.020	0.222	0.040	N/A	N/A	0.020
S7580ZOV551RA960	1.476	0.373	2.225	1.000	0.020	0.225	0.040	N/A	N/A	0.020
D7580ZOV551RA960	1.890	0.373	2.370	1.000	0.020	0.225	0.040	N/A	N/A	0.020
D7780ZOV551RA1500	2.400	0.373	3.075	1.000	0.020	0.226	0.040	N/A	N/A	0.020
S6680ZOV581RA520	1.142	0.382	1.970	1.000	0.020	0.231	0.040	N/A	N/A	0.020
D7880ZOV581RA650	1.575	0.382	2.213	1.000	0.020	0.231	0.040	N/A	N/A	0.020
S7580ZOV581RA1000	1.476	0.382	2.225	1.000	0.020	0.234	0.040	N/A	N/A	0.020
D7580ZOV581RA1000	1.890	0.382	2.370	1.000	0.020	0.234	0.040	N/A	N/A	0.020
D7780ZOV581RA1580	2.400	0.382	3.075	1.000	0.020	0.235	0.040	N/A	N/A	0.020
S6680ZOV621RA550	1.142	0.395	1.970	1.000	0.020	0.242	0.040	N/A	N/A	0.020
D7880ZOV621RA680	1.575	0.395	2.213	1.000	0.020	0.242	0.040	N/A	N/A	0.020
S7580ZOV621RA1040	1.476	0.395	2.225	1.000	0.020	0.245	0.040	N/A	N/A	0.020
D7580ZOV621RA1040	1.890	0.395	2.370	1.000	0.020	0.245	0.040	N/A	N/A	0.020
D7780ZOV621RA1750	2.400	0.395	3.075	1.000	0.020	0.247	0.040	N/A	N/A	0.020

NOTE: Alternate dimensional specifications, including lead styles, for any part listed may be available upon request. Please contact us for any inquiries.

HIGH ENERGY SERIES

SPECIFICATIONS

680VAC thru 1000VAC VARISTORS

Maida Style Number	Recognitions To Safety Agency Standards						Nominal Size	Minimum Marking	Maximum Ratings						Electrical Characteristics					
									Continuous		Transient				Varistor Voltage @1 mA DC		Max Clamping Voltage (@Test Current)		Typical Cap. @1 V rms @1kHz	
									Applied Voltage		Energy		Peak Current							
											10 x 1000 μ sec	8 x 20 μ sec	# Pulses							
									(AC)	(DC)	(J)	(J)	(A)	(A)	Vmin	Vmax	(8 x 20 μ sec)			
S6680ZOV681RA620	X	X				25	C5S-681UL	680	860	620	620	20000	14000	962	1175	1800	100	840		
D7880ZOV681RA760	X	X				32	Z681-760UL	680	860	760	760	25000	20000	962	1175	1800	200	770		
S7580ZOV681RA1100	X	X				34	D4S-681UL	680	860	1100	1100	40000	32000	962	1175	1800	300	1500		
D7580ZOV681RA1100	X	X				40	Z681-1100UL	680	860	1100	1100	40000	32000	962	1175	1800	300	1000		
D7780ZOV681RA1800	X	X				53	Z681-1800UL	680	860	2500	2500	70000	52000	962	1175	1800	500	1700		
S6680ZOV751RA670	X	X				25	C5S-751UL	750	970	670	670	20000	14000	1062	1300	2100	100	750		
D7880ZOV751RA800	X	X				32	Z751-800UL	750	970	800	800	25000	20000	1062	1300	2100	200	680		
S7580ZOV751RA1200	X	X				34	D4S-751UL	750	970	1200	1200	40000	32000	1062	1300	2100	300	1300		
D7580ZOV751RA1200	X	X				40	Z751-1200UL	750	970	1200	1200	40000	32000	1062	1300	2100	300	940		
D7780ZOV751RA2000	X	X				53	Z751-2000UL	750	970	2600	2600	70000	52000	1062	1300	2100	500	1500		
S6680ZOV881RA780	X	X				25	C5S-881UL	880	1150	780	780	20000	14000	1245	1520	2290	100	650		
D7880ZOV881RA850	X	X				32	Z881-850UL	880	1150	850	850	25000	20000	1245	1520	2290	200	590		
S7580ZOV881RA1300	X	X				34	D4S-881UL	880	1150	1300	1300	40000	32000	1245	1520	2290	300	1100		
D7580ZOV881RA1300	X	X				40	Z881-1300UL	880	1150	1300	1300	40000	32000	1245	1520	2290	300	810		
D7780ZOV881RA2500	X	X				53	Z881-2500UL	880	1150	3200	3200	70000	52000	1245	1520	2290	500	1300		
S6680ZOV102RA860	X	X				25	C5S-102UL	1000	1200	860	860	20000	14000	1414	1728	2700	100	570		
D7880ZOV102RA900	X					32	Z102-900UL	1000	1200	900	900	25000	20000	1414	1728	2700	200	520		
S7580ZOV102RA1400	X	X				34	D4S-102UL	1000	1200	1400	1400	40000	32000	1414	1728	2700	300	1000		
D7580ZOV102RA1400	X					40	Z102-1400UL	1000	1200	1400	1400	40000	32000	1414	1728	2700	300	710		
D7780ZOV102RA3000	X					53	Z102-3000UL	1000	1200	3200	3200	70000	52000	1414	1728	2700	500	1200		

NOTES:

Appendix A lists the single-pulse peak current and energy ratings on file with the Safety Agencies.

Maximum transient rating specified in this table are valid. They may differ from those shown in Appendix A.

A = UL1449 D = VDE

B = cUL E =

C = CSA F =

680VAC thru 1000VAC VARISTORS

Maida Style Number	MAX. Diameter (D) (in)	MAX. Thickness (T) (in)	MAX. Height (H) (in)	Typical X Dimension (in)	Typical X Tolerance (in)	Typical Y Dimension (in)	Typical Y Tolerance (in)	Typical Z Dimension (in)	Typical Z Tolerance (in)	Typical Wire Diameter (d) (in)
S6680ZOV681RA620	1.142	0.414	1.970	1.000	0.020	0.259	0.040	N/A	N/A	0.020
D7880ZOV681RA760	1.575	0.414	2.213	1.000	0.020	0.259	0.040	N/A	N/A	0.020
S7580ZOV681RA1100	1.476	0.414	2.225	1.000	0.020	0.262	0.040	N/A	N/A	0.020
D7580ZOV681RA1100	1.890	0.414	2.370	1.000	0.020	0.262	0.040	N/A	N/A	0.020
D7780ZOV681RA1800	2.400	0.414	3.075	1.000	0.020	0.264	0.040	N/A	N/A	0.020
S6680ZOV751RA670	1.142	0.460	1.970	1.000	0.020	0.282	0.040	N/A	N/A	0.020
D7880ZOV751RA800	1.575	0.460	2.213	1.000	0.020	0.281	0.040	N/A	N/A	0.020
S7580ZOV751RA1200	1.476	0.460	2.225	1.000	0.020	0.286	0.040	N/A	N/A	0.020
D7580ZOV751RA1200	1.890	0.460	2.370	1.000	0.020	0.284	0.040	N/A	N/A	0.020
D7780ZOV751RA2000	2.400	0.460	3.075	1.000	0.020	0.286	0.040	N/A	N/A	0.020
S6680ZOV881RA780	1.142	0.476	1.970	1.000	0.020	0.314	0.040	N/A	N/A	0.020
D7880ZOV881RA850	1.575	0.476	2.213	1.000	0.020	0.314	0.040	N/A	N/A	0.020
S7580ZOV881RA1300	1.476	0.476	2.225	1.000	0.020	0.319	0.040	N/A	N/A	0.020
D7580ZOV881RA1300	1.890	0.476	2.370	1.000	0.020	0.319	0.040	N/A	N/A	0.020
D7780ZOV881RA2500	2.400	0.476	3.075	1.000	0.020	0.321	0.040	N/A	N/A	0.020
S6680ZOV102RA860	1.142	0.514	1.970	1.000	0.020	0.349	0.040	N/A	N/A	0.020
D7880ZOV102RA900	1.575	0.514	2.213	1.000	0.020	0.349	0.040	N/A	N/A	0.020
S7580ZOV102RA1400	1.476	0.514	2.225	1.000	0.020	0.354	0.040	N/A	N/A	0.020
D7580ZOV102RA1400	1.890	0.514	2.370	1.000	0.020	0.354	0.040	N/A	N/A	0.020
D7780ZOV102RA3000	2.400	0.514	3.075	1.000	0.020	0.356	0.040	N/A	N/A	0.020

NOTE: Alternate dimensional specifications, including lead styles, for any part listed may be available upon request. Please contact us for any inquiries.