

EIA/IS-535BAAE

EIA INTERIM SPECIFICATION

Detail Specification for Low ESR Molded Tantalum Chip

EIA/IS-535BAAE

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ELECTRONIC INDUSTRIES ALLIANCE

Electronic Components, Assemblies, Equipment & Supplies Association



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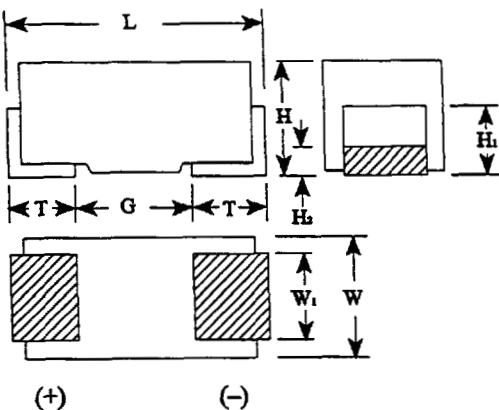
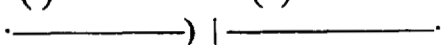
(From Project Number 3937, formulated under the cognizance of the P-2.5 Electrolytic Dielectric Capacitors Subcommittee.)

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ELECTRONICS INDUSTRIES ALLIANCE	EIA/IS-535BAAE										
Electronic components of assessed quality in accordance with: EIA-5350000 QC300000 (IEC 384-1)	QC300801/US0001										
Outline drawing: Third angle projection  (Other shapes permitted within the dimensions given) NOTES 1 Dimensions - see table 1 2 Recommended land patterns -- see 1.1 3 Marking - see 5.0 4 Solderability inspection-shaded areas, excluding edges.	Fixed tantalum chip capacitor style 1 protected (molded)										
	Polar, nonhermetically sealed chip capacitor with solid electrolyte and porous tantalum anode Electrical circuit (-) (+) 										
	Assessment level: E										
Quick reference data <table border="0"> <tr> <td>Rated capacitance range</td><td>- 4.7 μF to 330 μF</td></tr> <tr> <td>Capacitance tolerance</td><td>- $\pm 10\%$, $\pm 20\%$</td></tr> <tr> <td>Rated voltage range</td><td>- 6 volts DC - 50 volts DC</td></tr> <tr> <td>Climatic category</td><td>- 55/125/56</td></tr> <tr> <td>Performance level</td><td>- long life</td></tr> </table>		Rated capacitance range	- 4.7 μ F to 330 μ F	Capacitance tolerance	- $\pm 10\%$, $\pm 20\%$	Rated voltage range	- 6 volts DC - 50 volts DC	Climatic category	- 55/125/56	Performance level	- long life
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Performance level	- long life										
Suitable for surface mounting											

DETAIL SPECIFICATION FOR LOW ESR MOLDED TANTALUM CHIP**1 Recommended methods of mounting**

These components can be attached to glass epoxy or alumina substrates by conventional techniques, such as vapor-phase, infrared (IR) or thermal conduction reflow, wave soldering and hot plate/belt methods. In general, attachment with a soldering iron is not recommended due to the difficulty of consistently controlling temperature and time at temperature.

Recommended nominal temperature and duration: 230 °C for 30 seconds.

Maximum temperature and duration: 260 °C for 10 seconds.

1.1 Suggested land patterns

The land pattern designs included in IPC-SM-782, *Surface Mount Design and Land Pattern Standard*, are recommended as starting points for users, and may be optimized to suit their own unique process considerations and requirements.

2 Dimensions**Table 1—Dimensions of molded tantalum chip capacitors (mm)**

CASE SIZE	L	W	H	T	G (min.)	W ₁	H ₁ (Min)	H ₂ (min.)
6032	6.0 ± 0.3	3.2 ± 0.3	2.5 ± 0.3	1.3 ± 0.3	2.5	2.2 ± 0.1	1.0	0.5
7343	7.3 ± 0.3	4.3 ± 0.3	2.8 ± 0.3	1.3 ± 0.3	3.8	2.4 ± 0.1	1.0	0.5
7343H	7.3 ± 0.3	4.3 ± 0.3	4.0 ± 0.3	1.3 ± 0.3	3.8	2.4 ± 0.1	1.0	0.5

NOTES

- 1 "H" suffix in case size indicates high profile
- 2 W₁ = termination widths
H₁ = termination heights
H₂ = solderability inspection heights
- 3 A notch in the anode and/or cathode side metallization is at the option of the component manufacturer.
- 4 The termination width metalization applies only to the portion of the termination where contact is made to the PWB. The terminations may neck down on the height dimension to the termination width (W₁) at the mounting level on the PWB.