



The latest comprehensive data to fully support these parts is readily available.

**CASE SIZE WARNING**

Hitachi    NEC  
E    =    D  
D    =    D2  
See Equivalents Table Below

## STANDARD, COMPACT AND LOW ESR TANTALUM CAPACITORS

### TMC-S STANDARD AND TMC-M COMPACT

- GOOD RESISTANCE AGAINST SOLDERING HEAT
- EXCELLENT FREQUENCY AND IMPEDANCE CHARACTERISTICS
- TMC-M: SUPER COMPACT: 1/3 TO 1/2 THE SIZE OF TMC-S
- TMC-R: LOW ESR TANTALUM CAPACITOR

ALSO AVAILABLE, CALL FLINT FOR FURTHER DETAILS:

- TMC-H: HIGH HEAT RESISTANCE: 1,000 HRS @ 150°C
- TMC-T: FUSED: 10A, 2SEC; 3A, 100SEC
- TMC-U: ULTRA FLAT: 1.2mm HIGH

### SPECIFICATIONS

Applicable Standards Based on JIS C 5102 and JISC5143

PARAMETER	PERFORMANCE
Working Temperature Range	-55°C to +125°C.
Max Temp. @ rated voltage	+ 85°C.
Capacitance Tolerance	±20%: M. ±10%: K
Leakage Current	≤ 0.01 CV or 0.5µA whichever is greater      Rated voltage after 5 min
Heat Resistance, Immersion	Cases A, B: 260°C, 10 sec. Cases C, D, E: 260°C, 5 sec.
Heat Resistance, I.R. Reflow	All cases: 260°C, 10 sec.
Failure Rate	0.5% per 1,000 hrs at rated voltage and temperature.

### VOLTAGE RATINGS

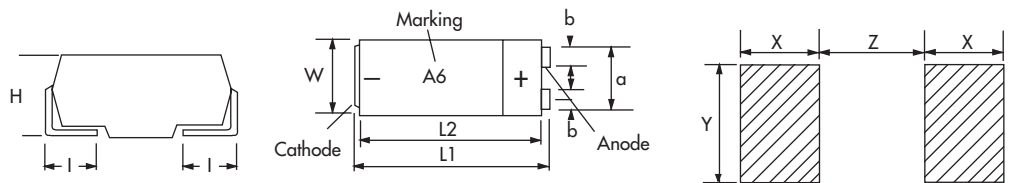
Rated Voltage	4	7*	10	16	20	25	35	50
Voltage Code	0G	0J	1A	1C	1D	1E	1V	1H
Surge Voltage	5	8	13	20	26	32	45	63
Derated V @ 125°C	2.5	4	6.3	10	13	16	22	32
Derated Surge V @ 125°C	3.2	5	8	13	16	20	28	40

\*: TMC-R is rated at 6.3V

### DIMENSIONS & TYPICAL FOOTPRINT

Case	L1	L2	W	H	l	a	b	x	y	z
A	3.2 ± 0.2	3.0 ± 0.1	1.6 ± 0.2	1.6 ± 0.2	0.7 ± 0.3	1.0 ± 0.2	0.3 ± 0.2	1.6	2.0	1.2
B	3.4 ± 0.2	3.2 ± 0.1	2.6 ± 0.2	1.9 ± 0.2	0.8 ± 0.3	1.8 ± 0.2	0.6 ± 0.2	1.6	3.2	1.4
C	5.8 ± 0.2	5.6 ± 0.1	3.2 ± 0.2	2.5 ± 0.2	1.3 ± 0.3	2.2 ± 0.2	0.7 ± 0.2	2.3	3.7	2.4
D	5.8 ± 0.2	5.6 ± 0.1	4.5 ± 0.2	3.1 ± 0.2	1.3 ± 0.3	3.1 ± 0.2	1.0 ± 0.2	2.3	5.0	2.4
E	7.3 ± 0.2	7.0 ± 0.1	4.3 ± 0.2	2.8 ± 0.2	1.3 ± 0.3	3.0 ± 0.2	-	2.3	4.8	3.8

All dimensions in mm.



### TAPE & REEL SPECIFICATIONS

<b>CASES A, B</b>	
Tape Width	8mm
Reel Diameter	178mm
Quantity	2,000
<b>CASES C, D, E</b>	
Tape Width	12mm
Reel Diameter	178mm
Quantity	500

### CASE SIZE EQUIVALENT

Typical Size mm	Hitachi TMC	AVX TAJ	Siemens B45196	Kemet T491	Natpan ECST	NEC NR	Sprague 293D
3.2 x 1.6	A	A	A	Y	A	A/A2	
3.5 x 2.8	B	B	B	B	X	B2	B
6.0 x 3.2	C	C	C	C	C	C	C
5.8 x 4.5	D	-	-	-	-	D2	E
7.3 x 4.3	E	D	D	D	D	D	D

### SQP - SMALL QUANTITY PRICES

A typical unit price for a quantity of 100 pieces. It will vary (up or down) depending on the time, order value etc. Call us for your update.