

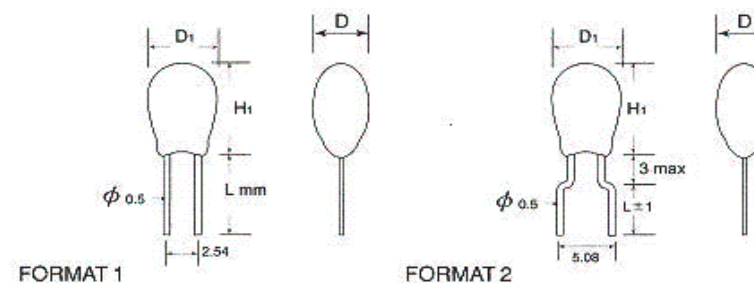
# EDCON-COMPONENTS



## Specifications

Radial Solid Tantalum Electrolytic Capacitor THT Type  
 Rated Voltage from 6,3 ~ 50Volt  
 Capacitance Range from 0,1 $\mu$ F ~ 470 $\mu$ F  
 Tolerance 10% or 20%  
 Highly reliable resin dipped type  
 Excellent frequency and temperature characteristics  
 Non flammable epoxy resin

## Technical Drawing



## Technical

## Performance Characteristics

Operating Temperature Range . -55 to +125°C ( -55 to +85° for 4 & 6,3 V)  
 Rated Working Voltage Range 6,3 ~ 50 VDC  
 Nominal Capacitance Range 0,1 ~ 33 $\mu$ F  
 Capacitance Tolerance .+/-20% ( +/-10% is available) ( 120Hz +/-20%)  
 Leakage Current Not more than 0,008CV ( $\mu$ A) or 0,5 $\mu$ A whichever is greater

Characteristics at high and low Temperature	Cap. $\mu$ F	Capacit. Change (%)			DF max. %				DCL max. ( $\mu$ F)		
		-.50% °C	+.85%° C	+.125% °C	-.50°C	+.20°C	+.85°C	+.125°C	+.20°C	+.85°C	+.125°C
$\leq 1.0$	. +10	. +15	. +25	6	4	6	6	10 lo	10 lo	12,5 lo	
1,5-68				8	6	8	8				
100-330				10	8	10	10				

## Dimensions (mm)

Case Size	A	B	C	D	E	F
Formats 1/2/H1 max.	7	8	9,5	11	13,5	16,5
D1 max.	4,5	5,0	5,5	6,5	8,5	9,5
D max.	4,2	4,7	5,5	6,5	8,5	9,5

Wire length (L)	5,7 +/-1	16,18 +/-1
Code	A	B

## Standard Radial Tantalum Capacitor 50V

Part No.: **I16001**

Customer:

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	20.05.2010
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## Moisture Resistance

Test conditions	
Relative humidity	: 90 to 95% without load
Ambient Temperature:	: + 40°C
Duration:	: 500hours
Post test requirements at 20°C	
Leakager current	: ≤ 0,012CV or 0,75(µF) wichever is greater
Capacitance Change	: +/-10% of initial measured value
tan	: ≤ 150% of initial spevified value

## Shelf Life

Test conditions		Post test requirements at +20°C
Duration	:2000 hours	Same limits for "Endurance"
Ambient temperature	: +85°C	
Applied Voltage	: none	

## Tinned radial leads Ø 0,5min.

## Temperature: 260°C

Time of immersions: 3s	Time of immersions: 3S
Standard lead spacing :2,54/5,08 +/-0,5mm	The tin should cover 95% of wire surface
Solderability	Permissible pull test: 10N
Recommended soldering bath	

## Endurance

Test conditions		
Conditions Item	Derating (for 10 to 50V only	Rating
Duration	1000hours	2000 hours
Ambient Temperature	.+105°C	.+ 85°C
Applied voltage	Derated working voltage	Rated working voltage
Source impedance	1 Ω/V	1 Ω/V

## Derating Voltage +125°C for 10~50V working

Rated Voltage	4,0	6,3	10,0	16	20	25	35,0	50,0
Voltage Derating	2,5	4,0	6,3	10,0	13,0	16,0	23,0	33,0
Surge Voltage +85°C	5,0	8,0	13,0	20,0	26,0	32,0	36,0	65,0
Surge Voltage +0°C	3,4	5,0	9,0	12,0	16,0	20,0	26,0	38,0

## Post test requirements at +20°C

Leakage current	≤ 0,01% CV or 0,0625 (µA), whichever is greater
Capacitance change	.+10% of inital measured value
tan	≤ initial specified value

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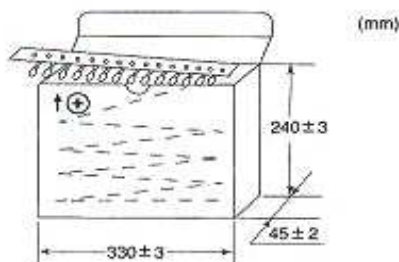
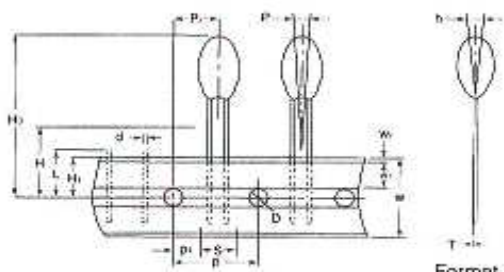
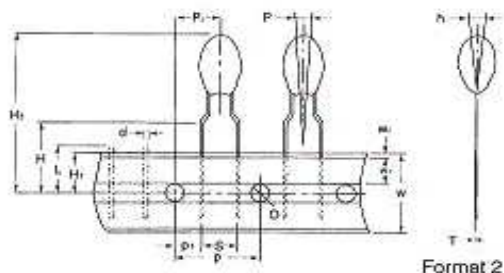
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## Packing Specification Tape & Ammo Packing (conform to IEC288-2)



Item	Code	Dimension (mm)
Carrier tape width	W	18,0
Hold down tape width	W	6,0 +/-0,5
Hold down tape position	W	1,0max.
Feed hold diameter	D	4,0 +/-0,2
Feed hole pitch	P	12,7 +/-0,3
Hold center to lead	P	Format 1: 5,05 +/-0.7
		Format 2: 3,85 +/-0.7
Hole center to component center	P	6,35 +/-1.0
Lead wire clench height	H	16,0 +/-0,5
Hole position	H1	9,0 +/-0,5
Base of component height	H	0,8 min.
Component height	H	32,2max.
Components alignment	$\Delta P$	0 +/-1.3
	$\Delta h$	0 +/-2.0
Lead spacing	S	'S' wires 2.5
		'B' wires 5.0
Lead diameter	d	0,5 +/-0,05
length of snipping lead	L	11,0 max.
Carrier tape thickness	T	0,5 +/-0,1

Quantity of Tape Ammo Packing type			
Case Code	A~B	C~D	E~F
QTY (PCS/box)	2500	2000	1000

CASE Size FORMAT	Qty per bag (cut ≤7mm)	CASE Size FORMAT	Qty per bag (cut ≤18mm)
from A to B	1000	from A to B	1000
from C to D	1000	from C to D	500
from E to F	500	from E to F	500

<b>Standard Radial Tantalum Capacitor 50V</b>	
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Capacitance	DCL (µA) max.	DF % max.	ESR max. (Ω) @ 100KHz
6,8µF	2,7µA	6%	2,0Ω

## Ordering Informations

Serie	Voltage Code	Tol. Code	Range Code	Case Code	Lead function	ROHS	Package			
<b>I16001</b>	<b>500</b>	<b>M</b>	<b>685</b>	<b>E</b>	<b>LL</b>	<b>R</b>	<b>BU</b>			

<b>500=</b> 50Volt	<b>M=</b> Tol. 20%	<b>685=</b> 6,8µF	<b>E=</b> Size Code	<b>LL=</b> Long Lead	<b>R=</b> ROHS Conform	<b>BU=</b> Bulk / Ware
	<b>K=</b> Tol. 10%			<b>L6=</b> Lead length 5,7 +/- 1mm	<b>N=</b> NON ROHS Conform	<b>TR=</b> Tape / Reel

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Soldering Profile Curve

Classification Reflow Profile (JEDEC J-STD-020C)



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Capacitor 50V

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