



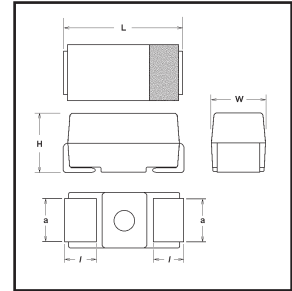
**SAH** SERIES

**INTRODUCTION**

SAH Series molded tantalum chip capacitors are specially developed for High Heat Resistance and High Reliability. Ideal for automotive electronics applications.

**FEATURES:**

- HIGH HEAT RESISTANCE MAKES IT SUITABLE FOR ALL TYPES OF SOLDERING
- HIGH RESISTANCE TO HEAT - 125°C WITH DERATED VOLTAGE FOR 2000 HRS. 150°C STEADY STATE FOR 1000 HRS.
- HIGH RESISTANCE TO MOISTURE. 85°C & 85% RH FOR 500 HRS. 65°C 95% RH WITH RATED VOLTAGE FOR 500 HRS.
- HIGHEST RELIABILITY DUE TO EXCEPTIONALLY LOW FAILURE RATE OF 0.5% PER 1000 HRS.
- COMPONENTS MEET EIAJ RC-3813 & JIS C 5102. REEL PACKING STDS - EIAJ RC-1009B /EIA 481/IEC 286-3.
- EPOXY MOLDED COMPONENTS WITH CONSISTENT DIMENSIONS AND SURFACE FINISH. ENGINEERED FOR AUTOMATIC ONsertION.
- COMPATIBLE WITH ALL POPULAR HIGH SPEED ASSEMBLY MACHINES.



**GENERAL SPECIFICATIONS**

**CAPACITANCE RANGE:** 1.0 μF to 68 μF. **VOLTAGE RANGE:** 4VDC to 50VDC. **CAPACITANCE TOLERANCE:** ±20%(M), ±10%(K), (±5%(J) - UPON REQUEST). **TEMPERATURE RANGE** -55 TO +125°C WITH DERATING ABOVE 85°C. **ENVIRONMENTAL CLASSIFICATION:** 55/125/56(IEC68-2). **DISSIPATION FACTOR:** 0.1μF TO 1μF 4 % MAX,1.5μF TO 68 μF 6% MAX. **LEAKAGE CURRENT:** NOT MORE THAN 0.005CV μA or 0.25 μA WHICHEVER IS GREATER. **FAILURE RATE:** 0.5%PER 1000 HRS.

**LIFE TEST DETAILS**

CAPACITORS SHALL WITHSTAND RATED DC VOLTAGE APPLIED AT 85°C for 2000 Hrs. or DERATED DC VOLTAGE APPLIED at 125°C for 1000 Hrs. AFTER THE TEST:

1. CAPACITANCE CHANGE SHALL NOT EXCEED ±10%OF INITIAL VALUE.
2. DISSIPATION FACTOR SHALL BE WITHIN THE NORMAL SPECIFIED LIMITS.
3. DC LEAKAGE CURRENT SHALL BE WITHIN 125% OF NORMAL LIMIT.
4. NO REMARKABLE CHANGE IN APPEARANCE. MARKINGS TO REMAIN LEGIBLE.

CASE DIMENSIONS IN MILLIMETERS (INCHES)						
CASE	EIA/IEC	L	W	H	I	a
B	3528	3.5±0.2 (0.138±0.008)	2.8±0.2 (0.110±0.008)	1.9±0.2 (0.075±0.008)	0.8±0.3 (0.031±0.012)	2.2±0.1 (0.087±0.004)
C	6032	6.0±0.3 (0.236±0.012)	3.2±0.3 (0.126±0.012)	2.5±0.3 (0.098±0.012)	1.3±0.3 (0.051±0.012)	2.2±0.1 (0.087±0.004)
D2	6045	5.8±0.3 (0.228±0.012)	4.5±0.3 (0.177±0.012)	3.1±0.3 (0.122±0.012)	1.3±0.3 (0.051±0.012)	3.1±0.1 (0.122±0.004)
D	7343	7.3±0.3 (0.287±0.012)	4.3±0.3 (0.170±0.012)	2.8±0.3 (0.110±0.012)	1.3±0.3 (0.051±0.012)	2.4±0.1 (0.095±0.004)

**SAH SERIES RATINGS AND CASE CODES**

CAPACITANCE CODE	μF	RATED VOLTAGE DC at 85 °C								
		4V	6.3V	10V	16V	20V	25V	35V	50V	
104	0.1							A	A	
154	0.15							A	B	
224	0.22							A	B	
334	0.33							A	B	
474	0.47						A	B	C	
684	0.68					A		B	C	
105	1.0				A			B	C	
155	1.5			A			B	C	D2, D	
225	2.2		A			B		C	D2, D	
335	3.3	A			B			C		
475	4.7			B			C	D2, D		
685	6.8		B			C		D2, D		
106	10	B			C		D2, D			
156	15			C		D2, D				
226	22		C		D2, D					
336	33	C		D2, D						
476	47		D2, D							
686	68	D2, D								

*HIGH  
RELIABILITY  
SERIES*



SAH SERIES SPECIFICATIONS

4 V DC Rated Voltage

Surge Voltage 5 VDC @ 85°C and 3.2 VDC @ 125°C

Table with 6 columns: SHARMA PART NUMBER, CAP VALUE, DCL (MAX), DF% (MAX), ESR(max) OHMS at 100KHz, RIPPLE (max) Irms Amps at 100 KHz. Rows include SAH A, B, C, D2, D.

6.3 V DC Rated Voltage

Surge Voltage 8 VDC @ 85°C and 5 VDC @ 125°C

Table with 6 columns: SHARMA PART NUMBER, CAP VALUE, DCL (MAX), DF% (MAX), ESR(max) OHMS at 100KHz, RIPPLE (max) Irms Amps at 100 KHz. Rows include SAH A, B, C, D2, D.

10 V DC Rated Voltage

Surge Voltage 13 VDC @ 85°C and 8 VDC @ 125°C

Table with 6 columns: SHARMA PART NUMBER, CAP VALUE, DCL (MAX), DF% (MAX), ESR(max) OHMS at 100KHz, RIPPLE (max) Irms Amps at 100 KHz. Rows include SAH A, B, C, D2, D.

16 V DC Rated Voltage

Surge Voltage 20 VDC @ 85°C and 13 VDC @ 125°C

Table with 6 columns: SHARMA PART NUMBER, CAP VALUE, DCL (MAX), DF% (MAX), ESR(max) OHMS at 100KHz, RIPPLE (max) Irms Amps at 100 KHz. Rows include SAH A, B, C, D2, D.

20 V DC Rated Voltage

Surge Voltage 26 VDC @ 85°C and 16 VDC @ 125°C

Table with 6 columns: SHARMA PART NUMBER, CAP VALUE, DCL (MAX), DF% (MAX), ESR(max) OHMS at 100KHz, RIPPLE (max) Irms Amps at 100 KHz. Rows include SAH A, B, C, D2, D.

25 V DC Rated Voltage

Surge Voltage 32 VDC @ 85°C and 20 VDC @ 125°C

Table with 6 columns: SHARMA PART NUMBER, CAP VALUE, DCL (MAX), DF% (MAX), ESR(max) OHMS at 100KHz, RIPPLE (max) Irms Amps at 100 KHz. Rows include SAH A, B, C, D2, D.

35 V DC Rated Voltage

Surge Voltage 45 VDC @ 85°C and 28 VDC @ 125°C

Table with 6 columns: SHARMA PART NUMBER, CAP VALUE, DCL (MAX), DF% (MAX), ESR(max) OHMS at 100KHz, RIPPLE (max) Irms Amps at 100 KHz. Rows include SAH A, B, C, D2, D.

50 V DC Rated Voltage

Surge Voltage 63 VDC @ 85°C and 40 VDC @ 125°C

Table with 6 columns: SHARMA PART NUMBER, CAP VALUE, DCL (MAX), DF% (MAX), ESR(max) OHMS at 100KHz, RIPPLE (max) Irms Amps at 100 KHz. Rows include SAH A, B, C, D2, D.

NOTE: FOR 10% TOLERANCE CHANGE TOLERANCE CODE FROM M TO K. FOR 5% TOLERANCE CHANGE TOLERANCE CODE FROM M TO J. STANDARD REEL SIZE AND ORIENTATION = R. FOR OTHER SEE ORDERING INFORMATION ON PAGE 3.