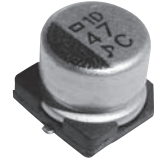


Alchip™-MAR Series



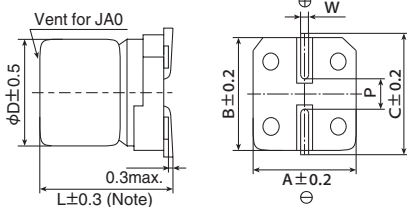
- Suitable for small and low profile product such as the car audio and electronics
- Non solvent resistant type
- RoHS Compliant

◆ SPECIFICATIONS

Items	Characteristics							
Category	-40 to +85°C							
Temperature Range	-40 to +85°C							
Rated Voltage Range	6.3 to 50V _{dc}							
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)							
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes)							
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V	50V	
	tan δ (Max.)	D55 to F55	0.30	0.24	0.20	0.16	0.14	0.12
		H63 to JA0	0.40	0.30	0.26	0.16	0.14	0.12
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V	50V	
	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	
	Z(-40°C)/Z(+20°C)	12	8	6	4	3	3	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 85°C.							
	Capacitance change	≤ ±20% of the initial value						
	D.F. (tan δ)	≤ 200% of the initial specified value						
	Leakage current	≤ The initial specified value						
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 500 hours at 85°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.							
	Capacitance change	≤ ±20% of the initial value						
	D.F. (tan δ)	≤ 200% of the initial specified value						
	Leakage current	≤ The initial specified value						

◆ DIMENSIONS [mm]

● Terminal Code : A



Note : L±0.5 for H63 to JA0

Size code	D	L	A	B	C	W	P
D55	4	5.2	4.3	4.3	5.1	0.5 to 0.8	1.0
E55	5	5.2	5.3	5.3	5.9	0.5 to 0.8	1.4
F55	6.3	5.2	6.6	6.6	7.2	0.5 to 0.8	1.9
H63	8	6.3	8.3	8.3	9.0	0.5 to 0.8	2.3
HA0	8	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1
JA0	10	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5

◆ MARKING

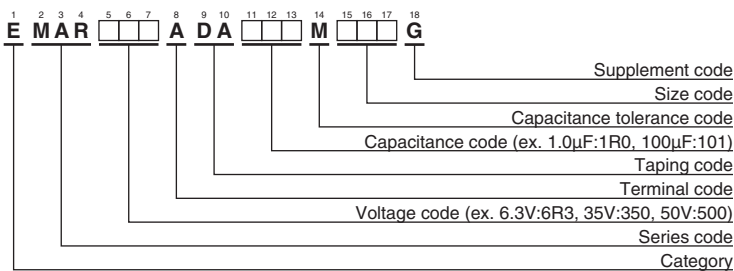
EX) 16V47μF



● Rated voltage symbol

Rated voltage (V _{dc})	Symbol
6.3	j
10	A
16	C
25	E
35	V
50	H

◆ PART NUMBERING SYSTEM



Please refer to "Product code guide (surface mount type)"

Alchip™ - MAR Series

◆ STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Size Code	tan δ	Part No.	WV (V _{dc})	Cap (μF)	Size Code	tan δ	Part No.
6.3	22	D55	0.30	EMAR6R3ADA220MD55G	25	4.7	D55	0.16	EMAR250ADA4R7MD55G
	33	E55	0.30	EMAR6R3ADA330ME55G		10	E55	0.16	EMAR250ADA100ME55G
	47	E55	0.30	EMAR6R3ADA470ME55G		22	F55	0.16	EMAR250ADA220MF55G
	100	F55	0.30	EMAR6R3ADA101MF55G		33	F55	0.16	EMAR250ADA330MF55G
	220	H63	0.40	EMAR6R3ADA221MH63G		47	H63	0.16	EMAR250ADA470MH63G
	330	H63	0.40	EMAR6R3ADA331MH63G		100	H63	0.16	EMAR250ADA101MH63G
	470	HA0	0.40	EMAR6R3ADA471MHA0G		220	HA0	0.16	EMAR250ADA221MHA0G
1,000	JA0	0.40	EMAR6R3ADA102MJA0G	330	JA0	0.16	EMAR250ADA331MJA0G		
10	10	D55	0.24	EMAR100ADA100MD55G	35	3.3	D55	0.14	EMAR350ADA3R3MD55G
	22	E55	0.24	EMAR100ADA220ME55G		4.7	D55	0.14	EMAR350ADA4R7MD55G
	33	E55	0.24	EMAR100ADA330ME55G		10	E55	0.14	EMAR350ADA100ME55G
	47	F55	0.24	EMAR100ADA470MF55G		22	F55	0.14	EMAR350ADA220MF55G
	100	F55	0.24	EMAR100ADA101MF55G		33	H63	0.14	EMAR350ADA330MH63G
	220	H63	0.30	EMAR100ADA221MH63G		47	H63	0.14	EMAR350ADA470MH63G
	330	HA0	0.30	EMAR100ADA331MHA0G		100	HA0	0.14	EMAR350ADA101MHA0G
470	JA0	0.30	EMAR100ADA471MJA0G	220	JA0	0.14	EMAR350ADA221MJA0G		
16	4.7	D55	0.20	EMAR160ADA4R7MD55G	50	1.0	D55	0.12	EMAR500ADA1R0MD55G
	10	D55	0.20	EMAR160ADA100MD55G		2.2	D55	0.12	EMAR500ADA2R2MD55G
	22	E55	0.20	EMAR160ADA220ME55G		3.3	D55	0.12	EMAR500ADA3R3MD55G
	33	F55	0.20	EMAR160ADA330MF55G		4.7	E55	0.12	EMAR500ADA4R7ME55G
	47	F55	0.20	EMAR160ADA470MF55G		10	F55	0.12	EMAR500ADA100MF55G
	100	H63	0.26	EMAR160ADA101MH63G		22	H63	0.12	EMAR500ADA220MH63G
	220	HA0	0.26	EMAR160ADA221MHA0G		33	H63	0.12	EMAR500ADA330MH63G
	330	HA0	0.26	EMAR160ADA331MHA0G		47	HA0	0.12	EMAR500ADA470MHA0G
470	JA0	0.26	EMAR160ADA471MJA0G	100	JA0	0.12	EMAR500ADA101MJA0G		