

Type ARPM

Metallized Polypropylene Dielectric



Physical

- | | |
|----------------------|---|
| Dielectric Material | • Polypropylene (metallized) |
| Electrode Material | • Vapor deposited aluminum |
| Winding Construction | • Non-inductive, extended metallized film |
| Lead Material | • Tinned wire |
| Enclosure | • Tape wrap with epoxy endfill |
| Component Marking | • Logo, type, capacitance value, tolerance, rated voltage and date code |
| Temperature Range | • -55°C to 105°C
-55°C to 85°C at rated voltage. From 85°C to 105°C derate DC voltage rating 1.25%/°C, AC voltage 1.5%/°C. |
| Temperature Coef. | • ±2% from -40°C to 85°C |
| Flame Retardancy | • Units meet standard industry requirements when tested as specified per IEC 695-2-2 and UL94 VO. |
| Packaging | • Bulk or tape & reel
Note: Through length .938 |

Electrical

- | | |
|-----------------------|---|
| Capacitance Range | • .0033µF to 10µF @ 1KHz |
| Tolerance | • ±2%, ±5%, ±10% (G, J, K) |
| Voltage Range | • 150VDC to 630VDC
(90 VAC to 280 VAC) |
| Dissipation Factor | • ≤0.1% @ 1KHz |
| Dielectric Strength | • 1.6 x rated voltage at 2 seconds |
| Dielectric Absorption | • 0.05% typical |
| Insulation Resistance | • See table |

Long Term Stability

+1.0% over two years at a temperature of between 20°C & 40°C and a RH of between 40% and 60%.

Insulation Resistance	
Category	150VDC - 630VDC
MegOhms x µF	200,000
MegOhms Maximum (Need Not Exceed)	500,000
Test Voltage	100VDC
Electrification Time	1 Minute

Performance Testing

Accelerated Dry Life:

- | | |
|--------------------------|---------------------------|
| Test Conditions DC | |
| Temperature | • 85°C ± 5.0°C |
| Applied Voltage | • 1.25 x rated DC voltage |
| Test Duration | • 1000 hours |
| Test Conditions AC | |
| Temperature | • 85°C ± 5.0°C |
| Applied Voltage | • 1.1 x rated voltage |
| Test Duration | • 1000 hours |
| Performance Requirements | |
| Capacitance | • delta of ≤5.0% |
| Dissipation Factor | • ≤.15% @ 1KHz |
| Insulation Resistance | • ≥50% of initial limit |

Humidity:

- | | |
|--------------------------|------------------------|
| Test Conditions | |
| Temperature | • 40°C ± 3.0°C |
| Applied Voltage | • Zero voltage |
| Humidity | • 93% ± 5% RH |
| Test Duration | • 500 hours |
| Performance Requirements | |
| Capacitance | • delta of ≤3.0% |
| Dissipation Factor | • ≤1.0% |
| Insulation Resistance | • 10% of initial limit |

Resistance To Solder Heat:

- | | |
|--------------------------|-------------------------|
| Test Conditions | |
| Solder Temperature | • 260°C ± 5.0°C |
| Test Duration | • 10 seconds ± 1 second |
| Performance Requirements | |
| Capacitance | • delta of ≤ 2.0% |

Lead Pull:

Must withstand a tensile force of 5 lbs applied to each lead for 5 seconds.

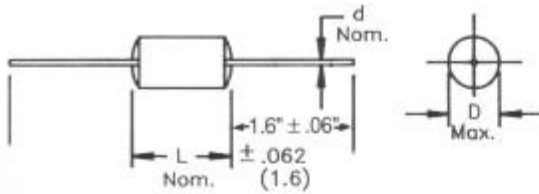
DV/DT Maximum Pulse Rise Time V/µ sec						
Volts	IN. (mm)	IN. (mm)	IN. (mm)	IN. (mm)	IN. (mm)	IN. (mm)
150	.562 (14.3)	.718 (18.2)	.938 (23.8)	1.25 (31.8)	1.75 (44.4)	2.25 (25.4)
250	20	20	15	12	10	10
400	40	30	16	14	12	
630	40	30	18	16	14	

Type ARPM

Part Numbering System

Example: 0.22 μ F $\pm$ 10%, 250Vdc, Bulk Package

ARPM **224** **10** **K** **GK** **K**
 Type Capacitance Code Voltage Code Tolerance Code Case Code Packaging Code



		Voltage Code 15		Voltage Code 25		Voltage Code 40		Voltage Code 63	
		150 Vdc (90 Vac)		250 Vdc (200 Vac)		400 Vdc (280 Vac)		630 Vdc (280 Vac)	
Capacitance μ F	Code	Dimensions Inches D & L	Case Code	Dimensions Inches D & L	Case Code	Dimensions Inches D & L	Case Code	Dimensions Inches D & L	Case Code
0.0033	332							.236 x .433	CB
0.0047	472							.254 x .433	DB
0.0068	682							.276 x .433	EB
0.010	103							.236 x .562	CC
0.015	153							.295 x .562	FC
0.022	223					.236 x .562	CC	.256 x .718	DF
0.033	333					.276 x .562	EC	.276 x .718	EF
0.047	473			.256 x .562	DC	.256 x .718	DF	.315 x .718	GF
0.068	683			.295 x .562	FC	.276 x .718	EF	.394 x .718	KF
0.10	104	.236 x .562	CC	.256 x .718	DF	.335 x .718	HF	.354 x .938	IK
0.15	154	.256 x .562	DC	.315 x .718	GF	.354 x .938	IK	.433 x .938	MK
0.22	224	.256 x .718	DF	.315 x .938	GK	.394 x .938	KK	.433 x 1.25	MP
0.33	334	.295 x .718	FF	.354 x .938	IK	.472 x .938	OK	.492 x 1.25	PP
0.47	474	.335 x .718	HF	.413 x .938	LK	.551 x .938	SK	.571 x 1.25	TP
0.68	684	.335 x .938	HK	.492 x .938	PK	.551 x 1.25	SP	.571 x 1.75	TU
1.00	105	.394 x .938	KK	.472 x 1.25	NP	.630 x 1.25	WP	.669 x 1.75	YU
1.50	155	.482 x .938	OK	.591 x 1.25	UP	.630 x 1.75	WU		
2.00	205	.551 x .938	SK	.669 x 1.25	YP	.709 x 1.75	1U		
3.00	305	.650 x .938	XK	.669 x 1.75	YU	.900 x 1.75	3U		
4.00	405	.600 x 1.25	XJ	.787 x 1.75	2U	1.00 x 1.75	9U		
5.00	505	.709 x 1.25	1P	.827 x 1.75	6U	1.25 x 1.75	8U		
10.00	106	1.00 x 1.75	9U	1.00 x 2.25	9X				

Case Code	Dimensions mm D(Max) x L(Nom)	Case Code	Dimensions mm D(Max) x L(Nom)	Case Code	Dimensions mm D(Max) x L(Nom)	Case Code	Dimensions mm D(Max) x L(Nom)
CB	6 x 11	GF	8 x 18.25	OK	12 x 24	XJ	15.2 x 31.75
CC	6 x 14.25	GK	8 x 24	PK	12.5 x 24	XK	16.5 x 24
DB	6.45 x 11	HF	8.5 x 18.25	PP	12.5 x 31.75	YP	17 x 31.75
DC	6.5 x 14.25	HK	8.5 x 24	SK	14 x 24	YU	17 x 44.5
DF	6.5 x 18.25	IK	9 x 24	SP	14 x 31.75	1U	18 x 44.5
EB	7 x 11	KK	10 x 24	TP	14.5 x 31.75	2U	20 x 45.7
EC	7 x 14.25	LK	10.5 x 24	TU	14.5 x 44.5	3U	22.9 x 44.5
EF	7 x 18.25	MK	11 x 24	UP	15 x 31.75	6U	21 x 44.5
FC	7.5 x 14.25	MP	11 x 31.75	WP	16 x 31.75	9U	25.4 x 44.5
FF	7.5 x 18.25	NP	11.5 x 31.75	WU	16 x 44.5	9X	25.4 x 57
						8U	31.75 x 44.5

D	d	AWG
$\leq .276$ IN. (7mm)	.025 IN. (.6mm)	#22
$> .276$ IN. (7mm)	.032 IN. (.8mm)	#20

