

# Chart of Standard Color Codes

A single reference source for all of the generally employed color codes on resistors and capacitors.

## APPLICABLE COLOR CODES

**DIRECTIONS**— Identify similar component type in the proper column on the lower section of the page. Read across the rows at the top to determine the significance or value of the various colors.

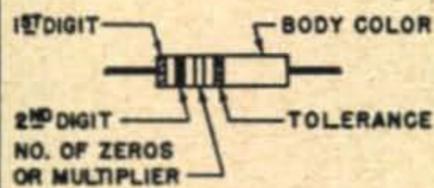
COLOR	DIGITS OR NO. OF ZEROS	RESISTORS RMA & JAN		CAPACITORS MOLDED MICA RMA & JAN			CAPACITORS MOLDED PAPER		CAPACITORS CERAMIC RMA & JAN			COLOR	DIGITS OR NO. OF ZEROS	
		MULTIPLIER	TOLERANCE	MULTIPLIER	TOLERANCE	CLASS OR CHARACTERISTIC	MULTIPLIER	TOLERANCE	MULTIPLIER	TOLERANCE	TEMP. COEFF. PTS./MIL./°C.			
BLACK	0	1		1	20%	A	1	20%	1	20%	2.0	0	BLACK	0
BROWN	1	10		10		B	10		10	1%	-30	1	BROWN	1
RED	2	100		100	2%	C	100		100	2%	-80	2	RED	2
ORANGE	3	1000		1000	3%(RMA)	D	1000		1000	2.5%(RMA)	-150	3	ORANGE	3
YELLOW	4	10000		10000		E	10000	5%	10000(RMA)		-220	4	YELLOW	4
GREEN	5	10 <sup>5</sup>			5%(RMA)	F (JAN)				5%	0.5	-330	GREEN	5
BLUE	6	10 <sup>6</sup>				G (JAN)					-470	6	BLUE	6
VIOLET	7	10 <sup>7</sup>									-750	7	VIOLET	7
GRAY	8	10 <sup>8</sup>				I (RMA)			.01	0.25	+30	8	GRAY	8
WHITE	9	10 <sup>9</sup>				J (RMA)		10%	.1	10%	1.0	-300 ± 500 JAN +120 - 120 RMA	WHITE	9
GOLD		.1	5%		5%(JAN)		.1	5%					GOLD	
SILVER		.01	10%		10%			10%					SILVER	
NO COLOR			20%					20%					NO COLOR	

### RESISTORS

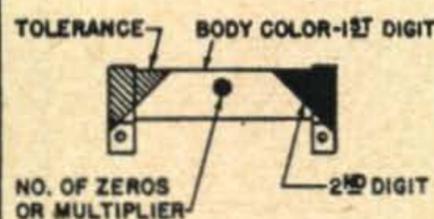
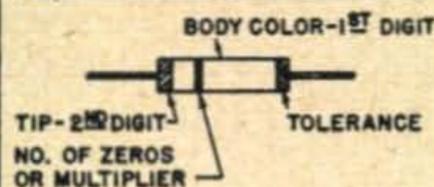
RMA & JAN COLOR CODING FOR FIXED COMPOSITION RESISTORS ARE IDENTICAL. COLOR CODE GIVES THE RESISTANCE IN OHMS.

#### COLOR BAND SYSTEM

RESISTORS WITH BLACK BODY COLOR ARE COMPOSITION, NON-INSULATED. RESISTORS WITH COLORED BODIES ARE COMPOSITION, INSULATED. WIRE-WOUND RESISTORS HAVE THE 1<sup>ST</sup> DIGIT COLOR BAND DOUBLE WIDTH.



#### BODY, TIP DOT OR NARROW BAND SYSTEM

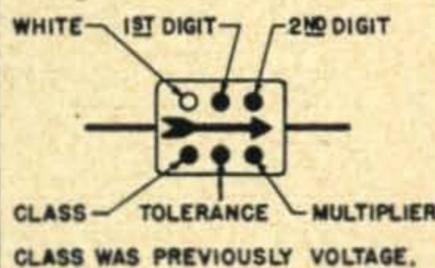


**EXAMPLE**— BROWN-GREEN-RED = 1500 Ω ± 20%

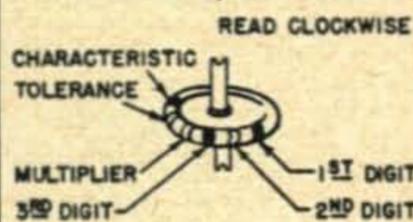
### CAPACITORS, MOLD. MICA

ALL AXIAL LEAD MICA CAPACITORS HAVE A VOLTAGE RATING OF 300 TO 500 VOLTS. THE MAXIMUM CAPACITY OBTAINABLE IS 10,000 μf. THE COLOR CODE GIVES THE CAPACITY IN μf.

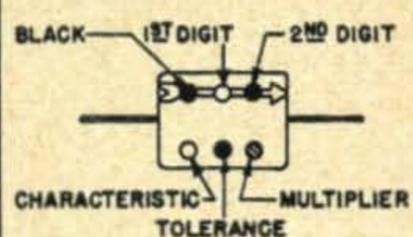
#### RMA 6 DOT SYSTEM



#### BUTTON SILVER MICA



#### JAN 6 DOT SYSTEM

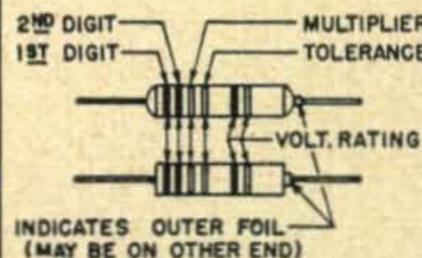


**EXAMPLE**— RMA 6 DOT  
WHITE-ORANGE-BLUE } 360 μf ± 2%  
WHITE-RED-BROWN } CLASS J

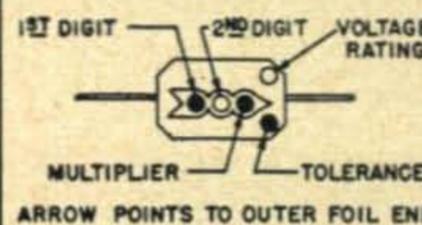
### CAPACITORS, MOLD. PAPER

VOLTAGE RATINGS IN HUNDREDS OF VOLTS. ONE COLOR BAND EMPLOYED FOR RATINGS UNDER 1000 VOLTS. THE COLOR CODE GIVES THE CAPACITY IN μf.

#### BAND SYSTEM



#### DOT SYSTEM

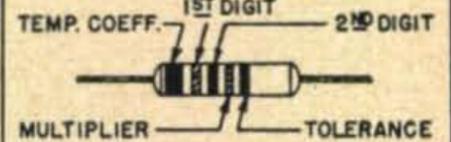


**EXAMPLE**— RED-GREEN-ORANGE-BLACK-BROWN-RED  
25000 μf ± 20% 1200 Volts

### CAPACITORS, CERAMIC

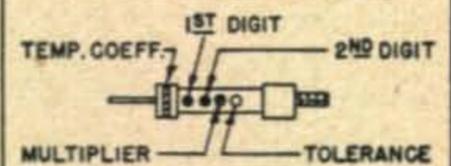
ALL TUBULAR CERAMIC CAPACITORS ARE RATED AT 500 VOLTS. THE COLOR CODE GIVES THE CAPACITY IN μf.

#### MOLDED INSULATED

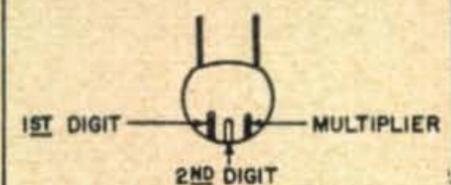
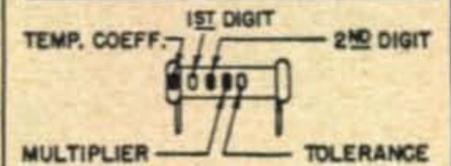


**NOTE**— DO NOT CONFUSE WITH RESISTORS. FIVE COLOR BANDS USED, (ONE BROAD, FOUR NARROW), WHILE RESISTORS USE FOUR BANDS.

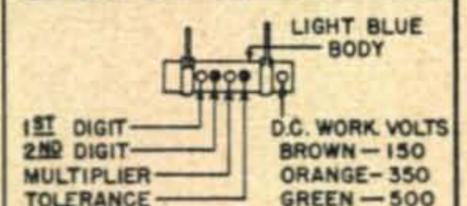
#### STANDOFF CERAMIC



#### DIPPED PHENOLIC INSULATED OR NON-INSULATED



#### HI-CAPACITY CERAMIC TYPE (NOT TEMPERATURE COMPENSATED)



**EXAMPLE**— BROWN-BLACK-ORANGE = 10000 μf  
(T-1540) (Date - 5/9/49)

Chart produced courtesy of RMC.