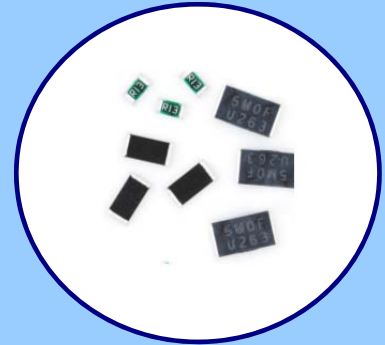


**FEATURES**

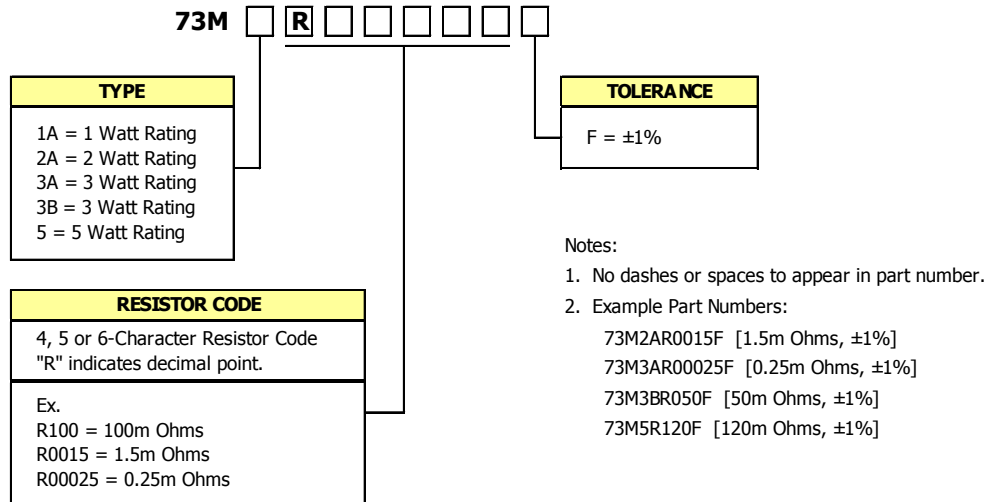
- Metal Plate Construction – Copper Alloy
- Power Rating @ +70°C, Options 1 – 5 Watts
- Resistance Range, 0.25 – 120 milliohms
- Operating Temperature to +155°C
- EIA Standard Package Sizes
- Terminal Finish – Tin (e3)
- Reflow capable per JEDEC J-STD-020, 260°C maximum
- Tape and Reel Packaging
- RoHS/Green Compliant [6/6]



**APPLICATIONS**

Ideal for applications such as current detection and limiting, regulated battery circuits, motor control, power supply, hard disk drives, inverter/converter, industrial equipment and automotive.

**ORDERING INFORMATION**



**Not all performance combinations and resistor values may be available.  
Contact your local CTS Representative or CTS Customer Service for availability.**

**STANDARD RESISTOR VALUES**

Standard Resistance Values [Based on EIA E-24 Sequence]  
4, 5, 6-Digit Codes

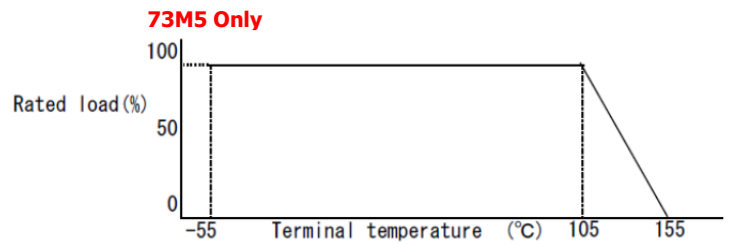
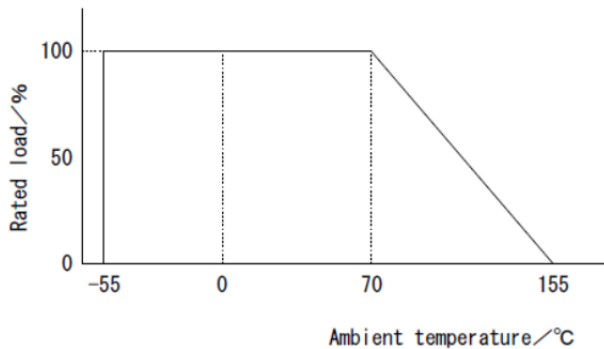
Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code
0.00025Ω	R00025	0.0090Ω	R009	0.0300Ω	R030	0.0820Ω	R082
0.00050Ω	R0005	0.0100Ω	R010	0.0330Ω	R033	0.0910Ω	R091
0.0010Ω	R001	0.0110Ω	R011	0.0360Ω	R036	0.1000Ω	R100
0.0015Ω	R0015	0.0120Ω	R012	0.0390Ω	R039	0.1100Ω	R110
0.0020Ω	R002	0.0130Ω	R013	0.0430Ω	R043	0.1200Ω	R120
0.0025Ω	R0025	0.0150Ω	R015	0.0470Ω	R047		
0.0030Ω	R003	0.0160Ω	R016	0.0500Ω	R050		
0.0040Ω	R004	0.0180Ω	R018	0.0510Ω	R051		
0.0050Ω	R005	0.0200Ω	R020	0.0560Ω	R056		
0.0060Ω	R006	0.0220Ω	R022	0.0620Ω	R062		
0.0070Ω	R007	0.0240Ω	R024	0.0680Ω	R068		
0.0080Ω	R008	0.0270Ω	R027	0.0750Ω	R075		

**ELECTRICAL CHARACTERISTICS**

Type	Rated Wattage [Watts]	Resistance [mΩ]	Tolerance [%]	T.C.R [ppm/°C]	Rated Ambient Temperature	Operating Temperature Range
73M1A	1	1 - 50	±1	R ≥ 0.010Ω: ±50 R < 0.010Ω: ±100	+70°C	-55°C to +155°C
73M2A	2	1 - 75	±1	R < 0.010Ω: ±100 R ≥ 0.010Ω: ±50	+70°C	-55°C to +155°C
73M3A	3	0.25 - 3	±1	R ≤ 0.001Ω: ±200 R > 0.001Ω: ±100	+70°C	-55°C to +155°C
73M3B	3	4 - 100	±1	±50	+70°C	-55°C to +155°C
73M5	5	1 - 120	±1	R < 0.010Ω: ±100 R ≥ 0.010Ω: ±50	+70°C	-55°C to +155°C

**DERATING CURVE**

Rated wattage is the maximum continuous power applicable at ambient temperature from -55°C to +70°C [73M5: -55°C to +105°C]. For ambient temperature above +70°C [+105°C], power rating is in accordance with Derating Curves below.

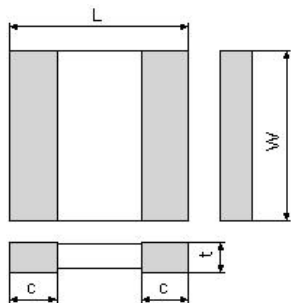


**PACKAGE DRAWING**

Dimensions [mm]	L	W	t	c	Resistance [mΩ]
73M1A	3.2 ±0.3	1.6 ±0.3	0.6 ±0.3	0.5 ±0.3	---
73M2A	6.3 ±0.3	3.2 ±0.3	0.8 ±0.3	1.9 ±0.3	1.0 - 4.0
			0.6 ±0.3	1.1 ±0.3	4.1 - 75
73M3A	6.8 ±0.3	6.5 ±0.3	1.3 Max.	2.2 ±0.3	0.25, 0.50
			1.4 Max.		1.0
			1.3 Max.	1.5	
			1.2 Max.	1.8 ±0.3	2.0
				1.6 ±0.3	2.5
73M3B	6.7 ±0.3	7.2 ±0.3	1.3 Max.	1.1 ±0.3	---
73M5	11.4 ±0.3	6.9 ±0.3	1.8 Max.	3.2 ±0.3	1.0 - 5.0
				1.8 ±0.3	5.1 - 120

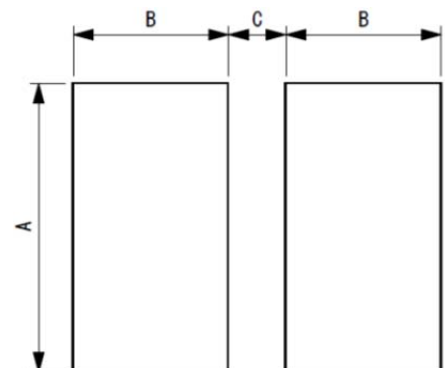
**RECOMMENDED LAND PATTERN**

Type	Dimensions [mm]			Resistance [mΩ]
	A	B	C	
73M1A	2.1	1.4	1.6	---
73M2A	3.7	2.8	1.9	1.0 - 4.0
		2.0	3.5	4.1 - 75
73M3A	7.1	3.8	1.4	0.25 - 1.5
		3.4	2.2	2.0
		3.2	2.6	2.5
		2.9	3.2	3.0
73M3B	7.8	2.7	3.5	---
73M5	7.5	4.8	4.0	1.0 - 5.0
		3.4	6.8	5.1 - 120



**NOTES**

- Terminal:  
Base Metal - Copper [Cu].  
Barrier Plating - Nickel [Ni].  
Finish Plating - Matte Tin [Sn].



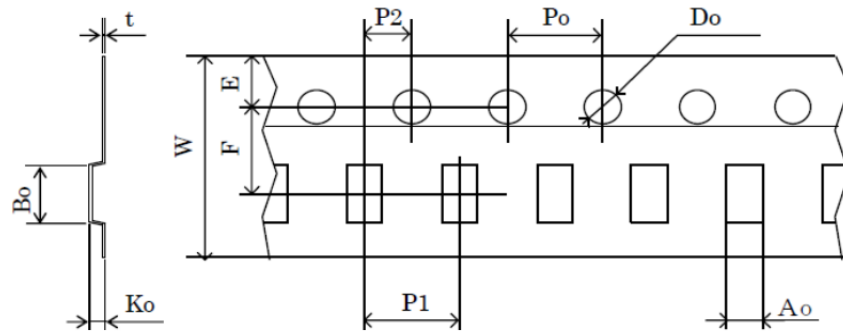
**PACKAGING INFORMATION**

**MARKING**

Type	Part Marking		
73M1A	Rxxx = "R" is the decimal point and 3 digits [E24] are significant values. See resistor tables for codes.	73M5	Rxxx = "R" is the decimal point and 3 digits [E24] are significant values. See resistor tables for codes.
73M2A	Rxxx = "R" is the decimal point and 3 digits [E24] are significant values. See resistor tables for codes.	73M3x	Rxxx = "R" is the decimal point and 3 digits [E24] are significant values. See resistor tables for codes.
	Nominal resistances that includes a decimal point; marking is denoted by "m" expressing a decimal point in milliohms and three digits. Ex. 1m50 [1.5m Ohms]		Nominal resistances that includes a decimal point; marking is denoted by "m" expressing a decimal point in milliohms and three digits. Ex. 0m25 [0.25m Ohms]

**EMBOSSED TAPE**

Type	W	P1	E	F	Do	P0	P2	Ao	Bo	Ko	t
73M1A	8.00 ±0.15	4.00 ±0.10	1.75 ±0.10	3.50 ±0.10	1.55 ±0.05	4.00 ±0.10	2.00 ±0.10	1.83 ±0.10	3.48 ±0.10	0.90 ±0.10	0.20 ±0.05
73M2A	12.00 ±0.15	4.00 ±0.10		5.50 ±0.10				3.50 ±0.10	6.74 ±0.10	1.10 ±0.10	0.20 ±0.05
73M3A	12.00 ±0.15	8.00 ±0.10		5.50 ±0.10	1.50 ±0.05			6.75 ±0.10	7.15 ±0.10	1.70 ±0.10	0.25 ±0.05
73M3B	12.00 ±0.15	12.00 ±0.10		5.50 ±0.10	1.55 ±0.05			7.70 ±0.10	7.15 ±0.10	1.20 ±0.10	0.25 ±0.05
73M5	24.00 ±0.30	12.00 ±0.10		11.50 ±0.10				7.20 ±0.10	11.80 ±0.10	1.70 ±0.10	0.30 ±0.10



**REEL**

[mm]

Type	Quantity Per Reel	W	M	A	B	C	D
73M1A	4,000	12.0 ±0.5	178 ±1.0	2.0 ±0.5	13.2 ±0.5	21.7 ±0.5	60.0 ±0.5
73M2A	4,000	16.2 ±0.5		2.5 ±0.6	13.5 ±0.6	21.9 ±0.6	
73M3A	1,000	16.2 ±0.5					
73M3B	1,000	16.2 ±0.5					
73M5	500	24.4 +2.0 -0.0					

