



PM-SMDL10 Series Shielded SMD Inductor

PM-SMDL1 series Shielded SMD Inductors are typically used in applications that require a small footprint.

- Small size.
- Magnetically shielded.

Figure 1: SCHEMATIC

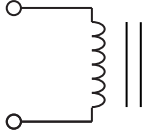


Figure 2: MECHANICAL SPECIFICATIONS (mm)

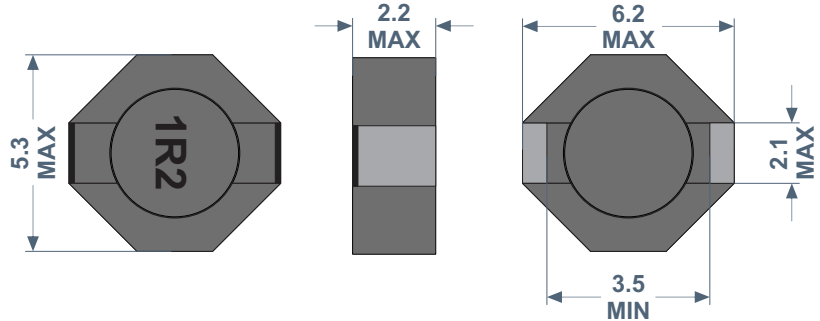


Table 1: PART NUMBER LIST.

PART NUMBER	L ($\mu\text{H} \pm 30\%$)	I_{DC} (A)	DCR_{MAX} (Ω)	I_{PK} (A)
PM-SMDL101R2	1.2	3.7	0.030	6.5
PM-SMDL101R8	1.8	3.3	0.038	5.8
PM-SMDL102R2	2.2	3.0	0.046	4.2
PM-SMDL103R3	3.3	2.4	0.065	3.4
PM-SMDL104R7	4.7	2.0	0.090	2.9
PM-SMDL106R8	6.8	1.9	0.130	2.6
PM-SMDL108R2	8.2	1.7	0.168	2.1
PM-SMDL10100	10.0 ⁽¹⁾	1.6	0.175	1.8
PM-SMDL10220	22.0 ⁽¹⁾	1.1	0.365	1.3
PM-SMDL10470	47.0 ⁽¹⁾	0.7	0.790	0.9

Table 2: ELECTRICAL SPECIFICATIONS 25°C

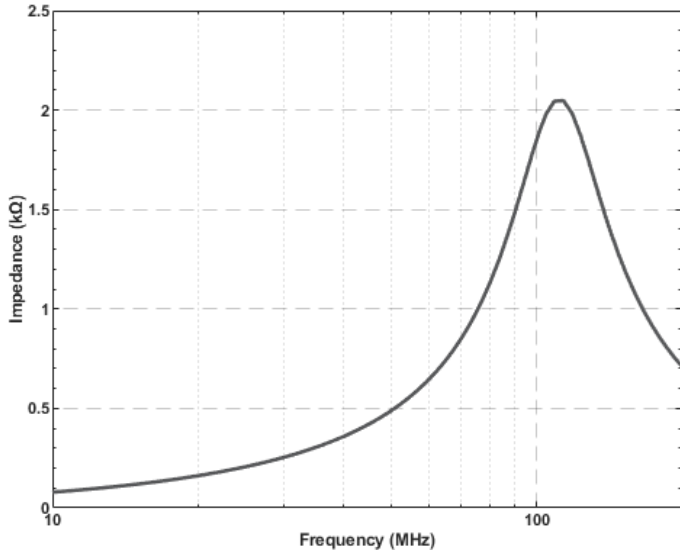
PARAMETERS	TEST CONDITION	MIN	TYP	MAX	UNIT
INDUCTANCE	1V _{RMS} , 100kHz	Table 1	-	-	μH
DC RESISTANCE		-	-	Table 1	Ω
WEIGHT		-	0.14	0.18	g

NOTES:

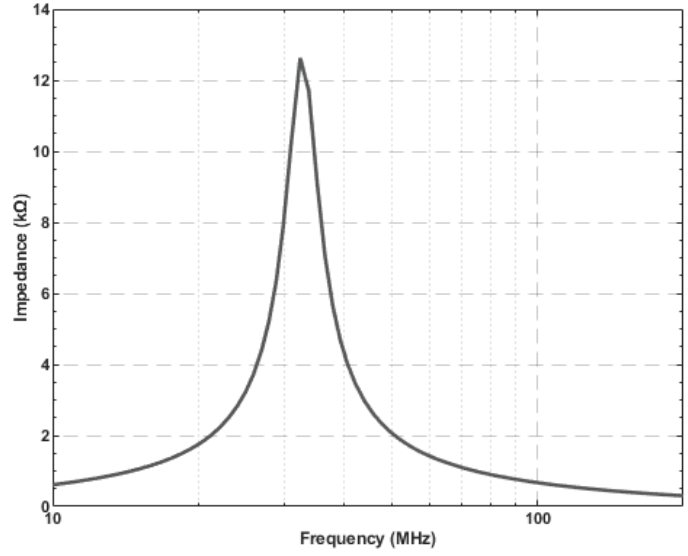
- 1) Tolerance is $\pm 20\%$.
- 2) I_{DC} is the TYP current that causes a temperature rise of 70°C.
- 3) I_{PK} is the TYP current that causes the nominal inductance to drop by 30%.
- 4) Operating temperature -60°C to +155°C.
- 5) Storage temperature 0°C to +40°C.
- 6) All units comply with REACH Regulation requirements.
- 7) All units comply with EU RoHS Directive requirements.
- 8) Marking is the last 3 digits of the part number.
- 9) Moisture Sensitivity Level(MSL) 1.

Figure 3: Impedance vs. Frequency reference.

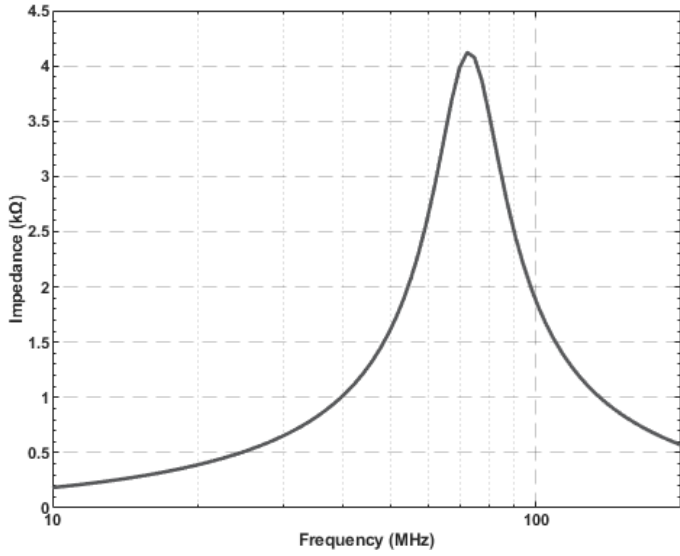
PM-SMDL101R8



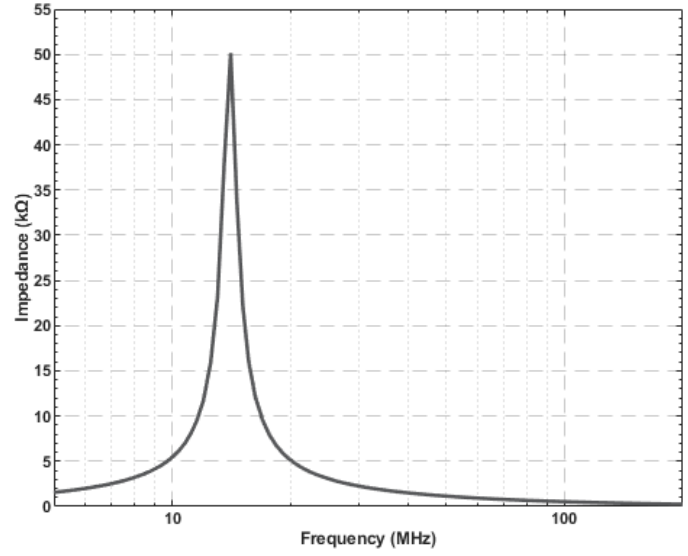
PM-SMDL10100



PM-SMDL103R3



PM-SMDL10470



PM-SMDL106R8

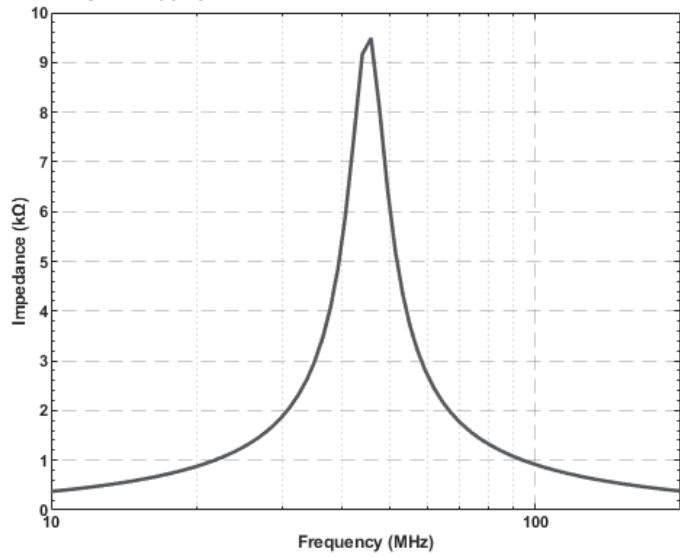


Table 3: Solder Profile.

PARAMETERS	CONDITION	MIN	TYP	MAX	UNIT
PREHEAT TEMPERATURE (T_s)		150	-	200	°C
PREHEAT TIME (t_s)		60	-	80	s
RAMP UP RATE		-	-	3	°C/s
LIQUIDOUS TEMPERATURE (T_L)		-	217	-	°C
TIME (t_L) MAINTAINED ABOVE T_L		60	-	150	s
PEAK TEMPERATURE (T_P)	10s MAX	-	-	250	°C
PEAK TIME (t_p)	245°C MAX	-	-	30	s
RAMP DOWN RATE		-	-	6	°C/s
TIME 25°C TO PEAK (t_{25-PK})		-	-	8	mins
HAND SOLDERING TEMPERATURE	3s MAX	-	-	350	°C
HAND SOLDERING TEMPERATURE	10s MAX	-	-	330	°C

Figure 4: Reflow Profile.

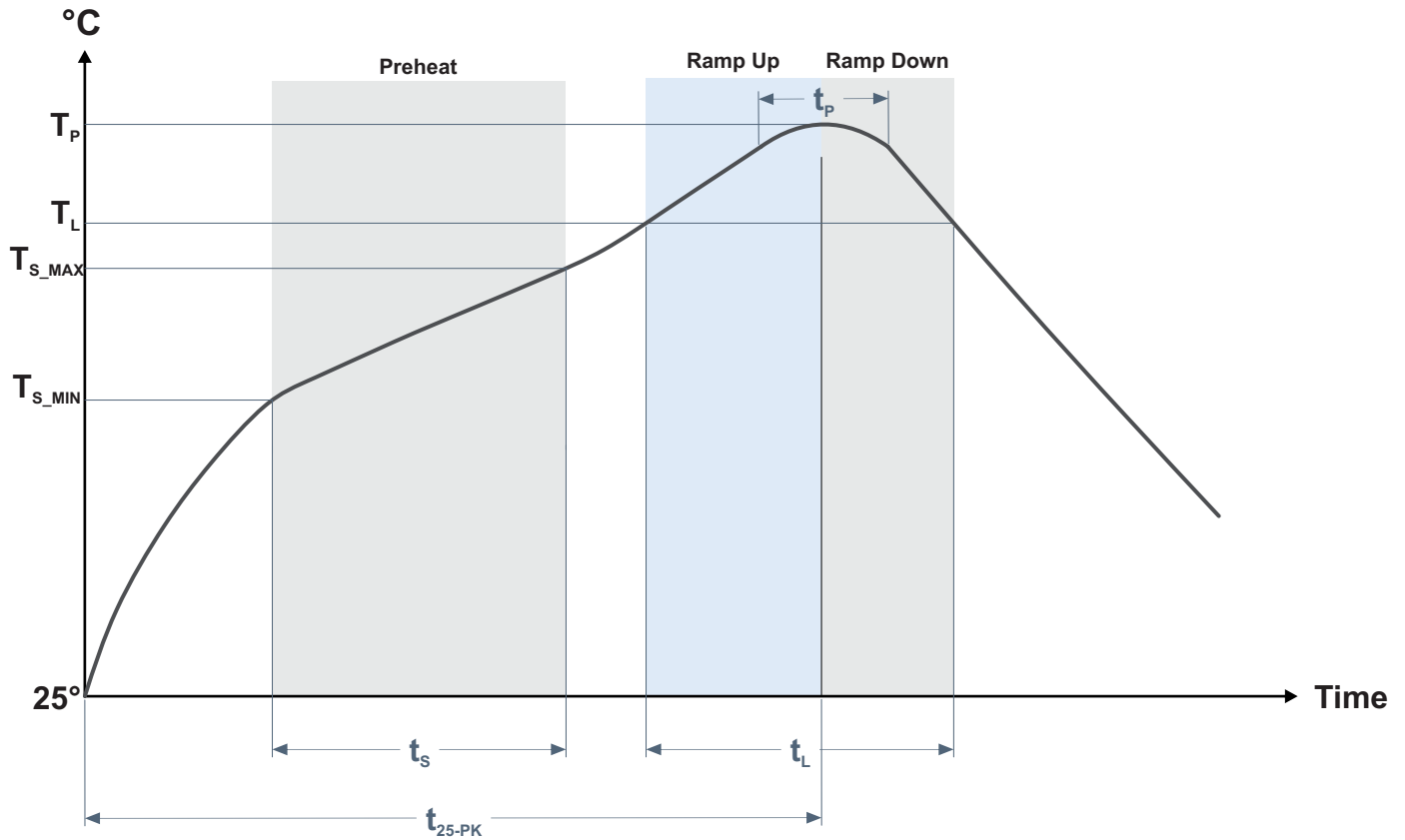
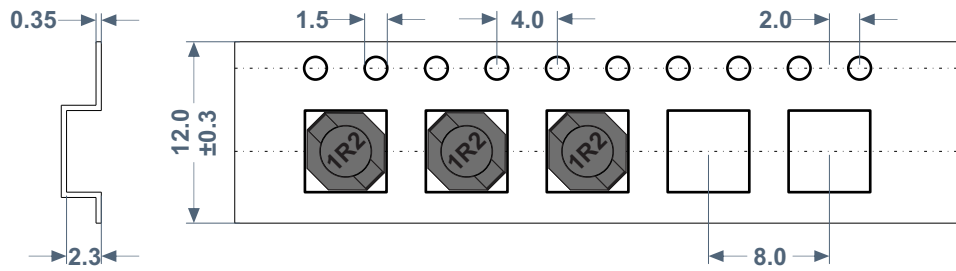


Figure 5: Tape and Reel



Notes:

1. All dimensions are in mm. Tolerance is ± 0.1 mm unless otherwise specified.
2. 2000pcs/reel.