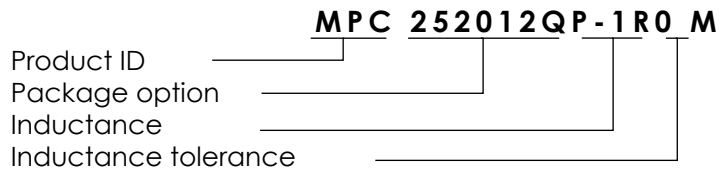


■ Feature

Size: 2.5mmx2.0mmx1.2mm

RoHS compliant.

■ Ordering Information



■ Electrical Characteristics (Ta=25°C unless otherwise specified)

Part Number	Inductance (μ H)	DC Resistance Typ., / Max., (m Ω)	Saturation current Typ., / Max., (A)	Temperature rise current Typ., / Max., (A)
MPC252012QP-R47M	0.47 \pm 20%	21 / 25	5.3/ 4.95	4.6 / 4.18
MPC252012QP-R68M	0.68 \pm 20%	29 / 35	5/ 4.63	3.7 / 3.36
MPC252012QP-1R0M	1.0 \pm 20%	42 / 48	4.5 / 4.1	3.4 / 3.2
MPC252012QP-1R5M	1.5 \pm 20%	64 / 77	3.2 / 2.91	2.5 / 2.27
MPC252012QP-2R2M	2.2 \pm 20%	86 / 100	3.1 / 2.8	2.3 / 2.1
MPC252012QP-3R3M	3.3 \pm 20%	125/150	2.1/1.8	2.0/1.8
MPC252012QP-4R7M	4.7 \pm 20%	198 / 232	1.9 / 1.6	1.6 / 1.4

Note 1: Referenced ambient temperature 25°C.

Note 2: Test Condition :1MHz/1V.

Note 3: I sat (Typ) : DC current (A) that will cause L0 to drop approximately 30%

I sat (Max) : DC current (A) that will cause L0 to drop 30% Max

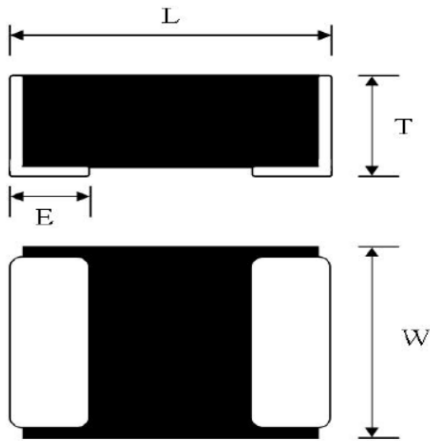
I rms (Typ) : DC current (A) that will cause an approximate Δ T of 40°C

I rms (Max) : DC current (A) that will cause an Δ T of 40°C Max

Note 4: Operating temperature : -40°C ~ +125°C. (Including self - temperature rise)

Note 5: The rated current as listed is either the saturation current or the heating current depending on which value is lower.

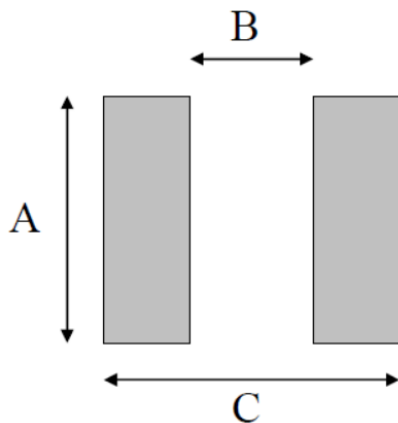
■ Package Outline



Unit: mm

Symbol	Dimensions
L	2.5 ±0.2
W	2.0 ±0.2
T	1.2 Max.
E	0.6 ±0.3

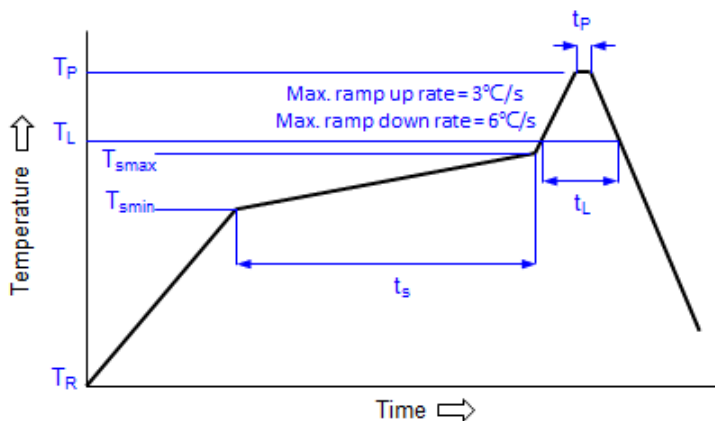
■ Land Pattern (Reference)



Unit: mm

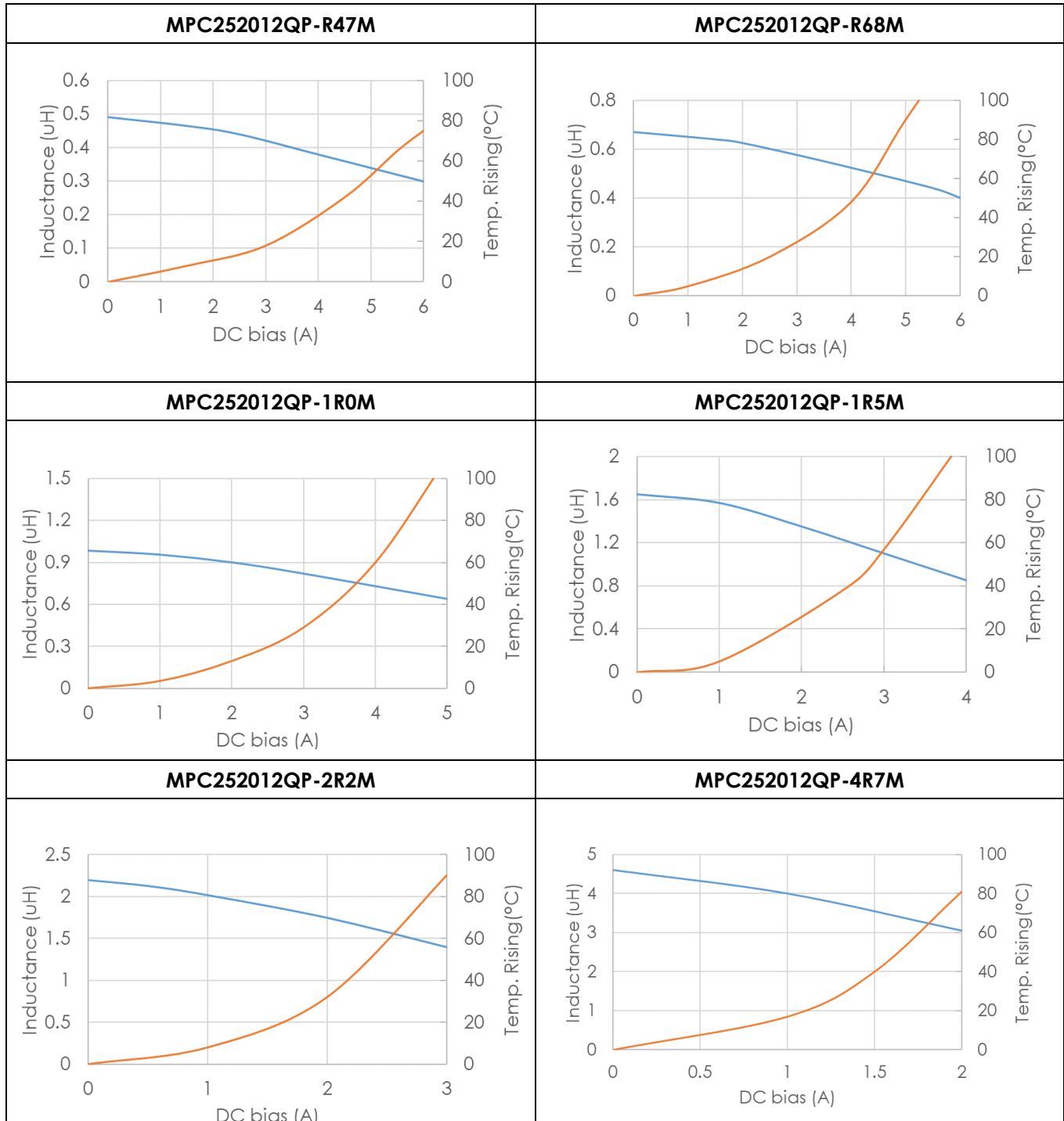
Symbol	Dimensions
A	2.0
B	1.2
C	2.8

■ Recommended Reflow Profile for SMT components

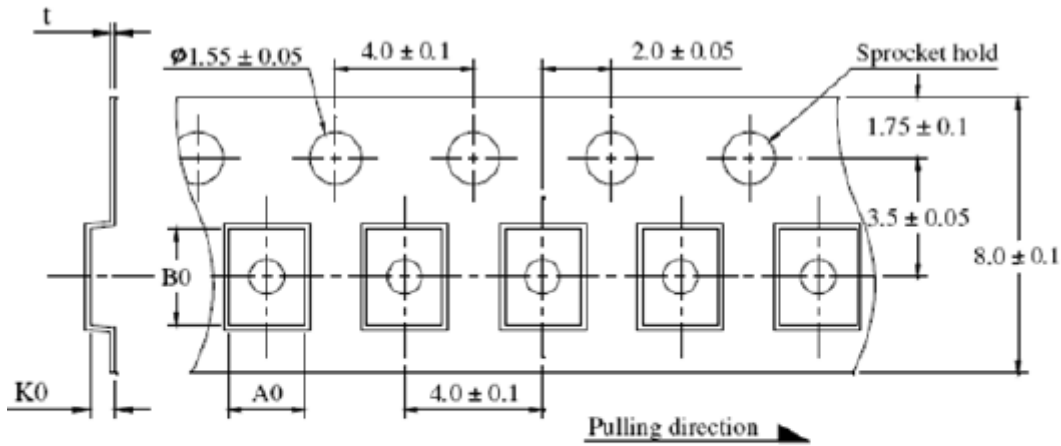


Profile feature	Pb-free assembly
Preheat	
- Temperature Min (T_{smin})	150°C
- Temperature Max (T_{smax})	200°C
- Time (t_s) from (T_{smin} to T_{smax})	60-180 seconds
Liquidous temperature (T_L)	217°C
Time (t_L) maintained above T_L	60-150 seconds
Peak temperature (T_p)	260+0/-5°C
Time within 5°C of actual peak temperature (T_p)	20-40 seconds
Time 25°C to peak temperature	8 minutes max.

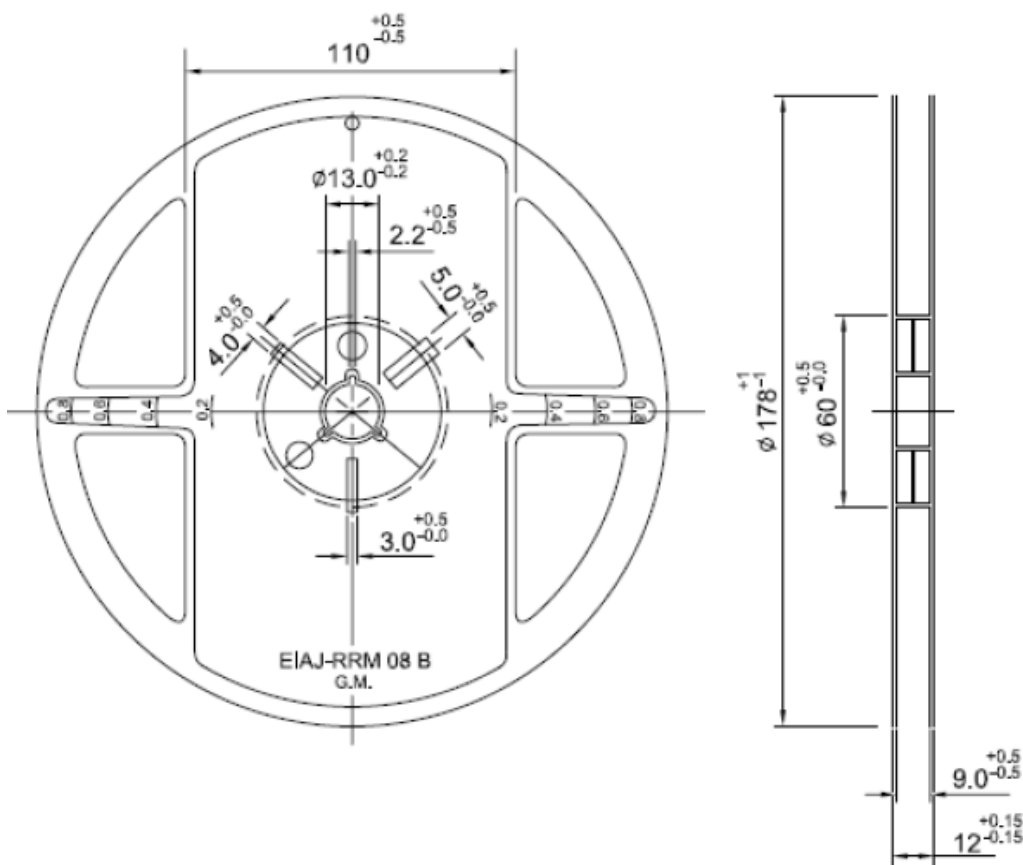
■ Typical Performance Curves



■ **Package**



	A0	B0	K0	t
mm	2.25 ± 0.05	2.80 ± 0.1	1.35 ± 0.1	0.22 ± 0.05



■ **Packaging Quantity**

3,000pcs/reel