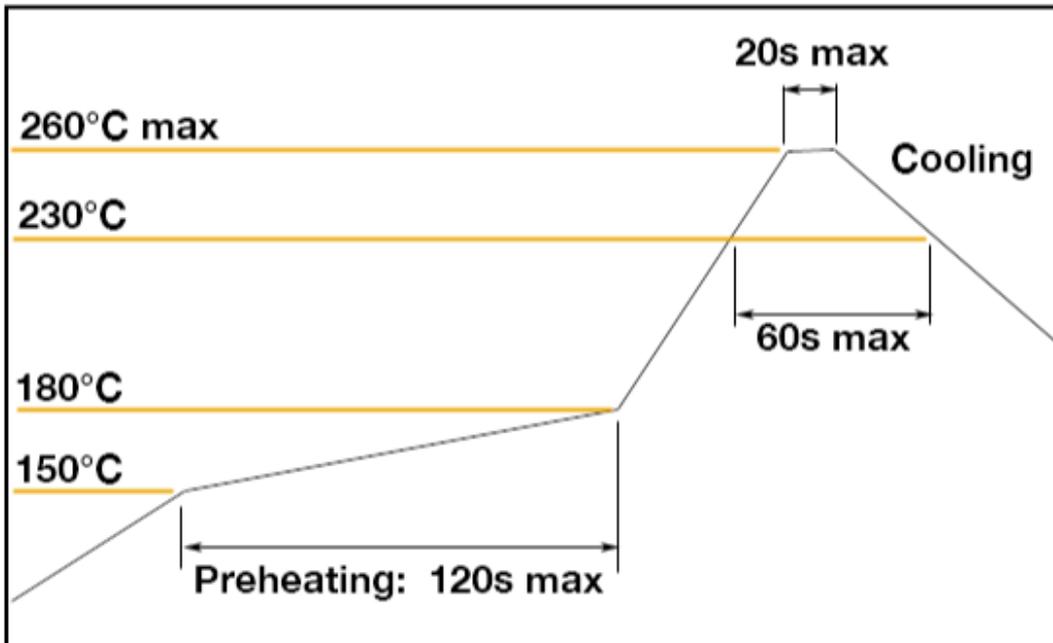


Manufacturing Reference Specification

1.0 Performance

Band	Frequency MHz]	Ave. gain (dBi)	Peak. Gain (dBi)	Eff.(%)
GSM850	824	-2.73	-0.21	53.36
	849	-2.77	-0.51	54.37
	869	-2.74	-0.74	53.26
	894	-1.22	0.67	75.50
GSM900	880	-2.00	-0.11	63.06
	915	-0.50	1.42	89.16
	925	-0.49	1.56	89.37
	960	-2.22	0.58	60.03
DCS	1710	-0.12	4.98	97.24
	1785	-0.13	5.03	97.35
	1805	-0.28	5.25	93.84
	1880	-0.90	4.97	81.34
PCS	1850	-0.39	5.52	91.39
	1910	-1.03	4.97	78.90
	1930	-1.16	4.94	76.50
	1990	-0.80	4.98	83.12
UMTS	1920	-1.11	4.94	77.41
	1980	-0.94	5.00	80.51
	2110	-1.11	4.01	77.45
	2170	-0.12	4.71	97.24

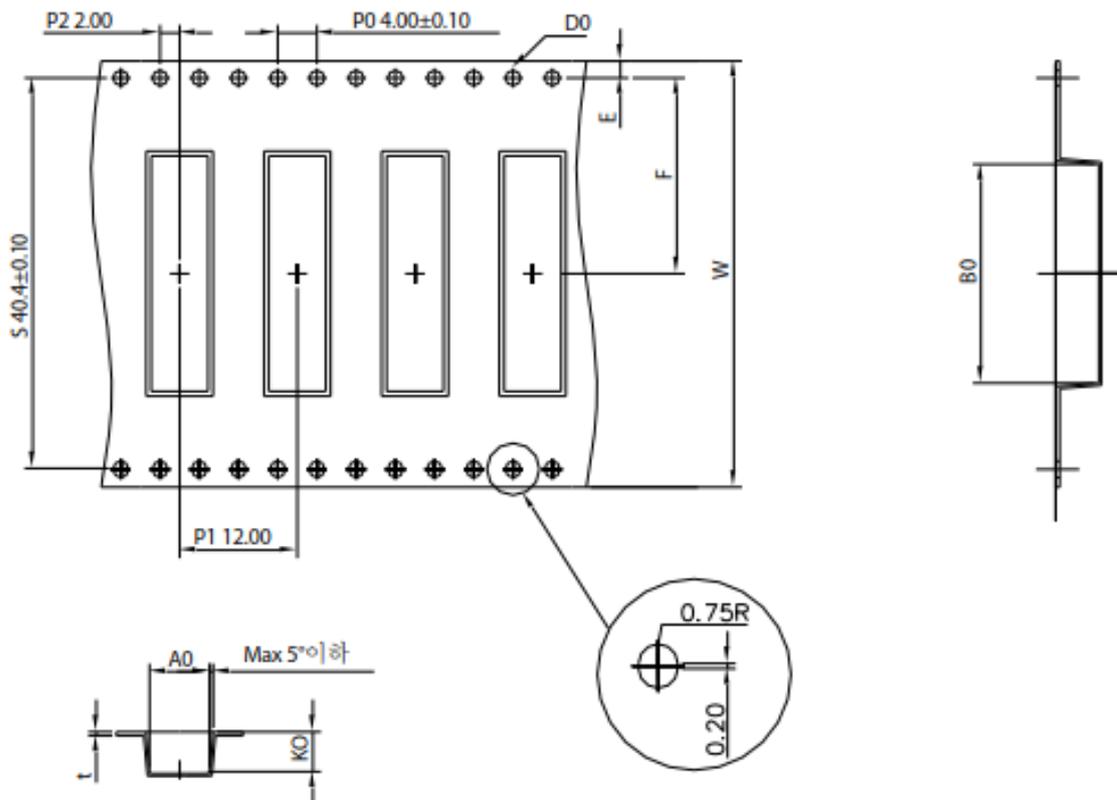
Soldering Profile



1. Solder Paste: Sn/Ag/Cu: 96.5/3.0/0.5
This product is designed for reflow soldering only. Do not use flow (wave) soldering.
2. Use non-activated flux (Cl content 0.2% max).
3. Follow the recommended soldering conditions to avoid damage.
4. Reflow-cycle is max 3 times.

3.0 Packaging (When purchasing 1k volume)

Tape Dimension (unit: mm)

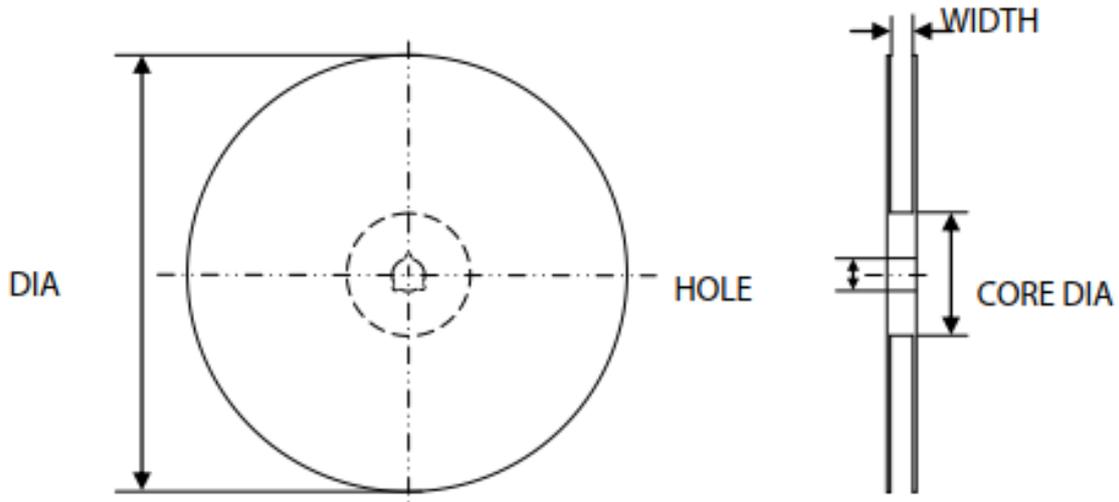


A0	5.80 ± 0.20	E	1.75 ± 0.10
B0	24.30 ± 0.20	F	20.20 ± 0.20
K0	4.60 ± 0.20	W	44.00 ± 0.30
D0	1.55 ± 0.05	t	0.40 ± 0.05

Surface Resistance

1. Carrier tape: Max $10^{11}\Omega$
2. Cover tape: Max $10^{11}\Omega$
3. Reel: Max $10^{11}\Omega$

3.1 Reel Specification (when purchasing 1k volume)



DIA	WIDTH	CORE DIA	HOLE
330.0 +0,-3	45.5 ± 0.3	100.0 ± 1	13.2 ± 0.5

3.2 Outer Packaging

Box (When purchasing 1k volume)

Size W350 x D345 x H55mm