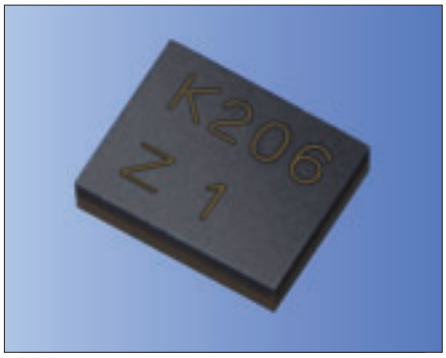
SAW Duplexers
SD25 Series



RoHS Compliant

Features

- High attenuation
- High isolation
- Rx balanced output type

Applications

- UMTS (W-CDMA)
- CDMA

How to Order

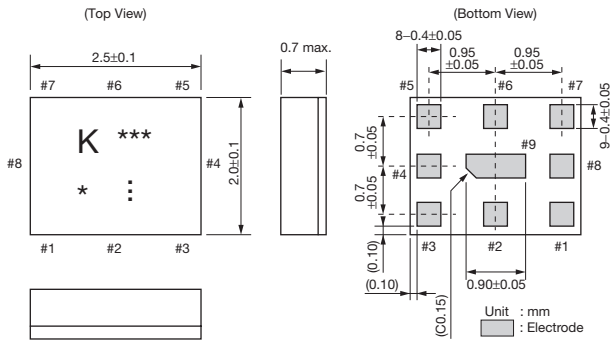
SD 25 - 1950 R 9 UB Q1
① ② ③ ④ ⑤ ⑥ ⑦

① Type of Product (SAW Duplexer)
② Package Size
③ Nominal Center Frequency
④ Spec.
⑤ Number of Terminals
⑥ Input/ Output
⑦ Custom Specification

Specifications

Part No.	Band	Condition	Pass Band Frequency	Insertion Loss (dB)	Pass Band Variation (dB)	VSWR	Absolute Rejection (dB)						Isolation Tx to Rx (dB)	Operating Temperature	Storage Temperature
SD25-1950R9UBQ1	Band1/ CDMA BC6	Tx to ANT	1920MHz - 1980MHz	2.3 max.	0.5 max.	2.2 max.	843MHz - 894MHz	1573MHz - 1577MHz	1805MHz - 1865MHz	1865MHz - 1880MHz	2110MHz - 2170MHz	2400MHz - 2500MHz	52 min.	−30 to +85°C	−40 to +85°C
							44 min.	43 min.	25 min.	8 min.	44 min.	32 min.			
		ANT to Rx	2110MHz - 2170MHz	2.5 max.	0.5 max.	2.2 max.	1920MHz - 1980MHz	1980MHz - 2025MHz	2255MHz - 2400MHz	2400MHz - 2484MHz	2484MHz - 6520MHz	—	50 min.		
							45 min.	15 min.	15 min.	30 min.	35 min.	—			
SD25-0836R9UBQ1	Band5/ CDMA BC0	Tx to ANT	824MHz - 849MHz	2.5 max.	1.5 max.	2.2 max.	701MHz - 728MHz	869MHz - 894MHz	1565MHz - 1606MHz	1930MHz - 1990MHz	2110MHz - 2170MHz	2400MHz - 2557MHz	55 min.	−30 to +85°C	−40 to +85°C
							35 min.	44 min.	35 min.	35 min.	33 min.	24 min.			
		ANT to Rx	869MHz - 894MHz	3.0 max.	1.5 max.	2.2 max.	824MHz - 849MHz	1000MHz - 1850MHz	1850MHz - 1920MHz	1920MHz - 6000MHz	—	—	50 min.		
							45 min.	28 min.	40 min.	35 min.	—	—			

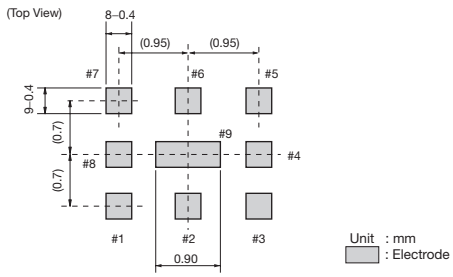
Dimensions



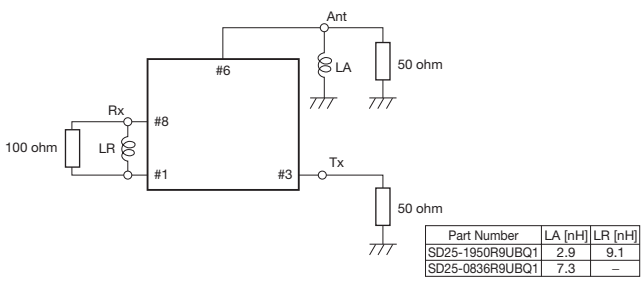
PIN No.	Function
#1	Rx
#2	GND
#3	Tx
#4	GND
#5	GND
#6	Ant
#7	GND
#8	Rx
#9	GND

Unit: mm
K : Kyocera logo
***: Identification no.
* : Monthly Code
⋮ : Index mark of ten days
(⁝1st-10th, ⁚11th-20th, ⋰ 21st-31st)

Recommended Land Pattern



Test Circuit

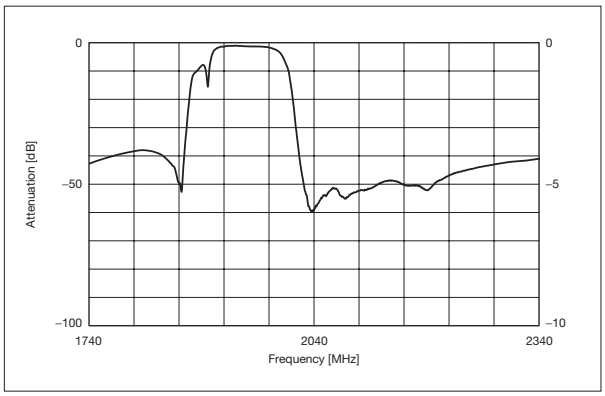


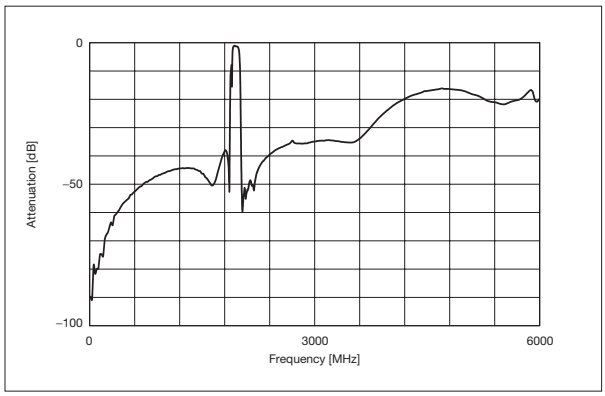
Part Number	LA [nH]	LR [nH]
SD25-1950R9UBQ1	2.9	9.1
SD25-0836R9UBQ1	7.3	–

Characteristics

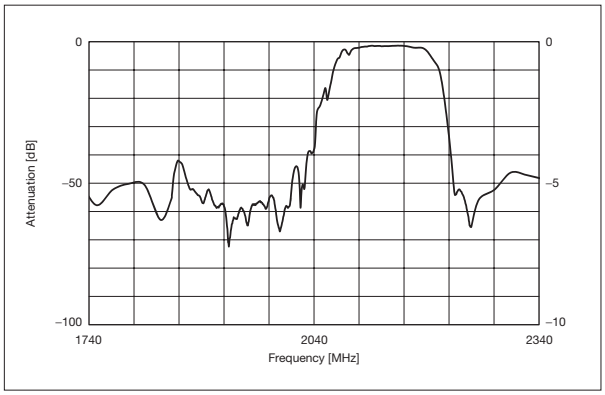
<UMTS Band1> Part No.: SD25-1950R9UBQ1

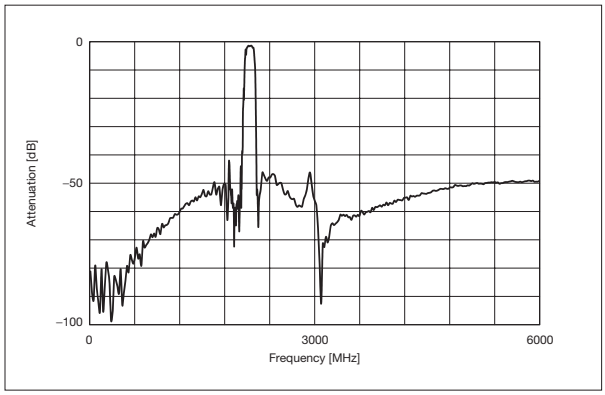
Tx to Ant



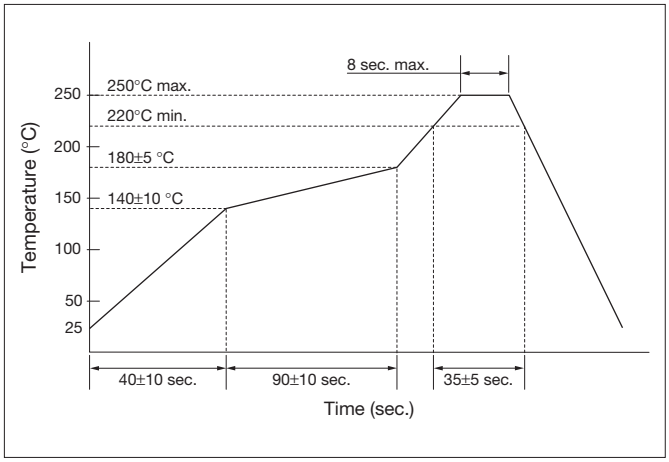


Ant to Rx





Recommended Reflow Profile

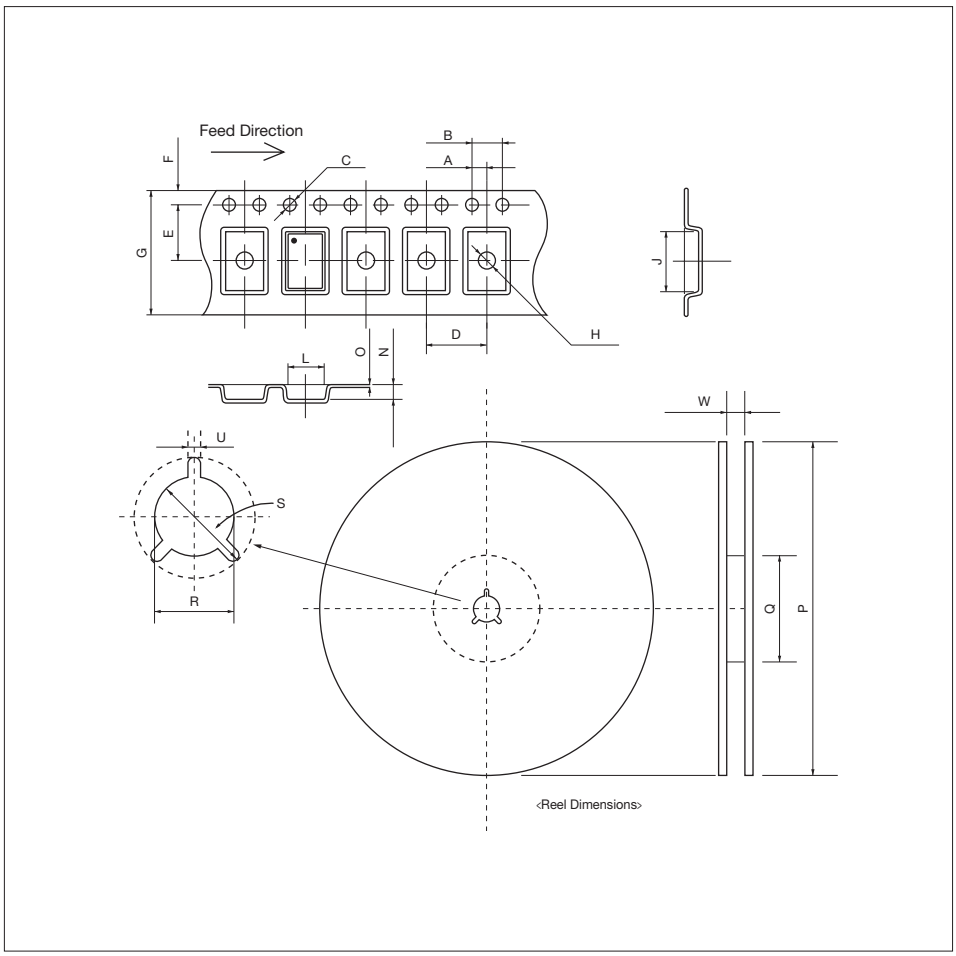


Tape & Reel Specifications

■ SAW Duplexers/ SAW Filters

(Unit: mm)

		SAW Duplexers			SAW Filters				
		SD18	SD20	SD25	SF14	SF15	SF16	SF18	SF20
TAPE	A	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05
	B	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1
	C	ϕ1.5+0.1/ −0	1.5±0.1	ϕ1.5±0.1	ϕ1.5±0.1	1.5±0.1	1.5±0.1	ϕ1.5+0.1/ −0	1.5±0.1
	D	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1
	E	3.5±0.05	3.5±0.05	3.5±0.05	3.5±0.05	3.5±0.05	3.5±0.05	3.5±0.05	3.5±0.05
	F	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1
	G	8.0±0.1	8.0±0.2	8.0±0.2	8.0±0.2	8.0±0.2	8.0±0.2	8.0±0.1	8.0±0.2
	H	ϕ0.8±0.05	1.1±0.1	ϕ1.1±0.1	ϕ0.5±0.05	0.5±0.1	1.1±0.1	ϕ0.8±0.05	1.1±0.1
	J	2.05±0.1	2.25±0.1	2.9±0.1	1.7±0.1	1.80±0.1	1.90±0.1	2.05±0.1	2.25±0.1
	L	1.7±0.1	1.8±0.1	2.4±0.1	1.4±0.1	1.4±0.1	1.85±0.1	1.7±0.1	1.8±0.1
	N	0.85+0/ −0.5	0.7±0.1	1.15±0.1	0.8±0.1	0.7±0.1	0.95±0.2	0.85+0/ −0.5	0.7±0.1
	O	0.2±0.05	0.2±0.05	0.25±0.05	0.2±0.05	0.2±0.05	0.25±0.05	0.2±0.05	0.2±0.05
REEL	P	ϕ178±2	ϕ178±2	ϕ178±2	ϕ178±2	ϕ178±2	ϕ178±2	ϕ178±2	ϕ178±2
	Q	ϕ60±2	ϕ60±2	ϕ60±2	ϕ60±2	ϕ60±2	ϕ60±2	ϕ60±2	ϕ60±2
	R	ϕ13±0.2	ϕ13±0.2	ϕ13±0.2	ϕ13±0.2	ϕ13±0.2	ϕ13±0.2	ϕ13±0.2	ϕ13±0.2
	S	ϕ21±0.8	ϕ21±0.8	ϕ21±0.8	ϕ21±0.8	ϕ21±0.8	ϕ21±0.8	ϕ21±0.8	ϕ21±0.8
	U	2±0.5	2±0.5	2±0.5	2±0.5	2±0.5	2±0.5	2±0.5	2±0.5
	W	9.5±1	9.5±1	9.5±1	9.5±1	9.5±1	9.5±1	9.5±1	9.5±1
Qty.		3000	3000	3000	3000	3000	3000	3000	3000



<Reel Dimensions>