

Preliminary



Automotive grade product

SF2670C

370/390 MHz

SM5050-8

MAXIMUM RATING:

- Input Power Level: 12 dBm
- DC Voltage : 3 V
- Operating Temperature: -30°C to +85°C
- Storage Temperature: -40°C to +85°C
- Moisture Sensitivity Level: Level 1(MSL1)
- AEC-Q200 Qualified

ELECTRICAL CHARACTERISTICS:

Terminating source impedance (single) :	Zs = 50 Ω
Terminating load impedance(single) :	ZL = 50 Ω

Item (Filter 1)	Unit	Min	Тур.	Max
Center frequency	MHz	-	370	-
Insertion Loss (360 – 380 MHz)	dB	-	2.4	3.0
Amplitude Ripple (360 – 380 MHz)	dB	-	1.0	2.0
Return Loss (360 – 380 MHz)	dB	8.0	11.0	-
Attenuation (Reference level from 0 dB)				
10 – 170 MHz	dB	35	55	-
170 – 315 MHz	dB	30	52	-
315 – 340 MHz	dB	20	45	-
400 – 420 MHz	dB	15	22	-
420 – 440 MHz	dB	25	44	-
440 –660 MHz	dB	30	44	-
660– 1000 MHz	dB	25	37	-
Temperature coefficient of Frequency	ppm/K		-36	

Item (Filter 2)	Unit	Min	Тур.	Мах
Center frequency	MHz	-	390	-
Insertion Loss (380 – 400 MHz)	dB	-	2.4	3.0
Amplitude Ripple (380 – 400 MHz)	dB	-	1.0	2.0
Return Loss (380 – 400 MHz)	dB	8.0	11.0	-
Attenuation (Reference level from 0 dB)				
10 – 190 MHz	dB	35	55	-
190 – 335 MHz	dB	30	51	-
335 – 360 MHz	dB	25	45	-
420 – 440 MHz	dB	15	22	-
440 – 460 MHz	dB	25	55	-
460 –680 MHz	dB	30	62	-
680– 1000 MHz	dB	25	44	-
Temperature coefficient of Frequency	ppm/K		-36	

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling. NOTES:

- The design, manufacturing process, and specifications of this device are subject to change.
 US or International patents may apply.
- 3. RoHS compliant from the first date of manufacture.

TEST CIRCUIT:



Frequency Characteristics:



Filter 1 - Span 200 MHz











Filter 2 - Span 1000 MHz





Filter 2 - Reflective characteristics

OUTLINE DRAWING:



Y = Year, WW = Week, S = Shift

1	Input (Filter 1)	5	Output (Filter 2)
2	Grounded	6	Grounded
3	Input (Filter 2)	7	Output (Filter 1)
4	Case Ground	8	Case Ground

PCB FOOTPRINT:



PACKING:



TAPE DIMENSION



Recommended Reflow Profile

- 1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
- 2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
- 3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (10 seconds).
- 4. Time: 5 times maximum.

