VMMX-1M/1000M-SMT

FEATURES

- LO/RF frequency range: 1～1000MHz
- IF frequency range: DC～1000MHz

TYPICAL APPLICATIONS

- Military
- Testing
- Commercial

ELECTRICAL SPECIFICATIONS

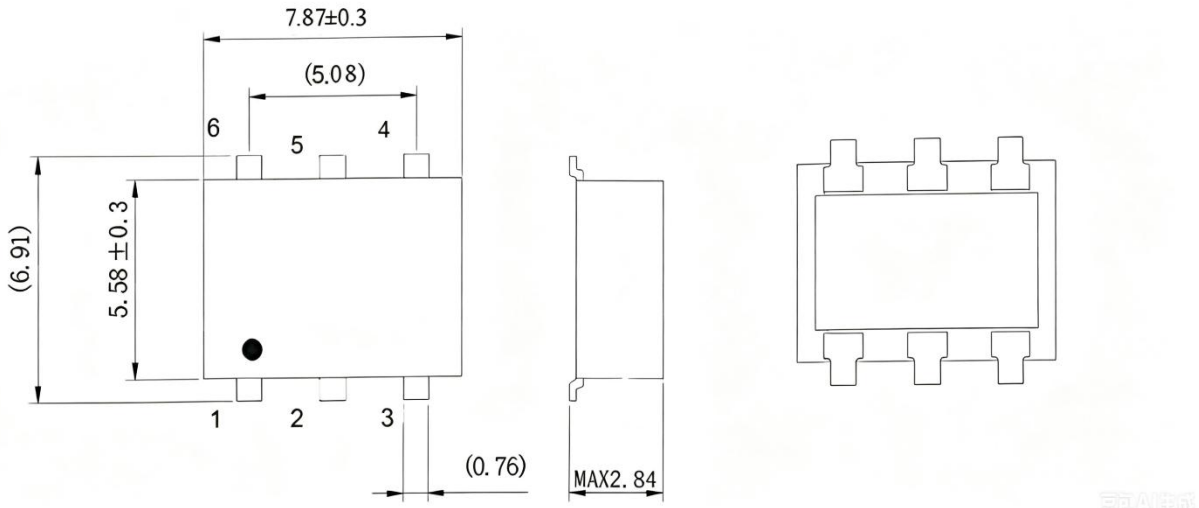
Parameter	Conditions	Performance	Unit
LO/RF Range	-	1～1000	MHz
IF Range	-	DC～1000	MHz
LO driver	-	7	dBm
Conversion Loss	1～1000MHz	≤9.5	dB
Isolation (L-R)	-	＞20	dB
Isolation (L-I)	-	＞12	dB
Operating Temperature	-	-55～+85	℃
Storage Temperature	-	-55～+100	℃

OUTLINE DRAWING

Plastic encapsulation.

Unit: mm

Weight: ≤5g



PIN DEFINITION

Pin Number	Function	Pin Number	Function
3	RF	1, 4, 5	GND
2	IF	6	LO

MOUNTING PROCEDURES

1. The product can be mounted via manual iron soldering or reflow soldering:

a) For manual iron soldering mounting: The tip temperature of the soldering iron shall be controlled within 320℃. The soldering duration for a single joint shall be less than 3s. For multi-point soldering, the interval between consecutive soldering of adjacent joints shall be at least 15s. Preheating is allowed for manual soldering, with a recommended preheating temperature of 120℃.

b) For reflow soldering mounting: The maximum temperature of the PCB shall not exceed 220℃. The recommended temperature profile requirements are as follows:

Requirements for Reflow Soldering Temperature Profile

Temperature Profile Parameter	Tin-Lead Alloy Profile
Alloy Melting Point	183℃
Alloy Soldering Temperature Range	210℃~220℃
Minimum Peak Temperature	205℃
Temperature Rise Slope	1℃/s～2℃/s
Temperature Fall Slope	1℃/s～4℃/s
Soaking Temperature	100℃~180℃
Soaking Duration	60s～120s
Reflow Duration	60s～90s
Peak Temperature Dwell Time	≤20s
Note 1: The minimum peak temperature refers to the lowest temperature on the PCB at peak stage. Note 2: Parameters including temperature rise slope, temperature fall slope, soaking temperature and soaking duration shall comply with the specifications provided by the solder paste manufacturer.	

2. The product adopts bottom-open surface-mount non-hermetic package. The housing is made of plastic; the leads are made of phosphor bronze, with nickel and tin surface plating. Nickel plating thickness: 1μm ~ 3μm; Tin plating thickness: 5μm ~ 8μm. No plating shall be applied on cut cross-sections.

3. The product falls into ESD Sensitivity Class 0 (200V). Strict ESD protection precautions shall be followed during operation and application.