**数据记录表格**

1. 静态工作点

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| VE/V |  |  |  |  |  |  |  |  |  |
| VB/V |  |  |  |  |  |  |  |  |  |
| VC/V |  |  |  |  |  |  |  |  |  |

（2）本振频率和输入信号频率  fL0=    fRF=

（3）寻找混频器最佳工作点（VL0=200mV，VRF=5mV，Re=1kΩ）

单级:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IE/mA |  |  |  |  |  |  |  |  |
| Vo/mV |  |  |  |  |  |  |  |  |
| AV |  |  |  |  |  |  |  |  |
| 20lgAv/dB |  |  |  |  |  |  |  |  |

与中放级联:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IE/mA |  |  |  |  |  |  |  |  |
| Vo/mV |  |  |  |  |  |  |  |  |
| AV联 |  |  |  |  |  |  |  |  |
| 20lgAv/dB |  |  |  |  |  |  |  |  |

（4）最大不失真时通频带宽

单级：

|  |  |  |  |
| --- | --- | --- | --- |
|  | *f*0.7H/MHz | *f*0.7L/MHz | *f*0/MHz |
| Vo/mV |  |  |  |
| 电压增益  Av2/Av0 |  |  |  |
| 频率值 |  |  |  |

Bw0.7单=

与中放级联：

|  |  |  |  |
| --- | --- | --- | --- |
|  | *f*0.7H/MHz | *f*0.7L/MHz | *f*0/MHz |
| Vo/mV |  |  |  |
| 电压增益  Av2/Av0 |  |  |  |
| 频率值 |  |  |  |

Bw0.7联=

（5）混频增益随本振信号幅度变化的曲线IE=    VRF=5mV

单级：

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| VL0/mV |  |  |  |  |  |  |  |
| Vo/mV |  |  |  |  |  |  |  |
| AV |  |  |  |  |  |  |  |
| 20lgAv/dB |  |  |  |  |  |  |  |

与中放级联：

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| VL0/mV |  |  |  |  |  |  |  |
| Vo/mV |  |  |  |  |  |  |  |
| AV联 |  |  |  |  |  |  |  |
| 20lgAv*联*/dB |  |  |  |  |  |  |  |

（6）输入信号幅度对混频器性能的影响IE=     VL0=100mV

单级：

|  |  |  |  |
| --- | --- | --- | --- |
| VRF/mV |  |  |  |
| Vo/mV |  |  |  |
| AV |  |  |  |
| 20lgAv/dB |  |  |  |

与中放级联：

|  |  |  |  |
| --- | --- | --- | --- |
| VRF/mV |  |  |  |
| Vo/mV |  |  |  |
| AV*联* |  |  |  |
| 20lgAv/dB |  |  |  |