

# Product Specification

Spec No.

1302010 C

Page

3/14

Model No.

2M137A-02BH

This Specifications is based on the General Rules of Inspection for Electron Tubes ED-1101 and the Testing Methods for Continuous Wave Magnetrons ED-1501 set by the Electronic Industries Association of Japan (EIAJ).

## Absolute Maximum Rating

| Description                          | Continuous Wave Magnetron (Fixed Frequency, Packaged Magnet and Probe Output) |     |    |      |      |     |            |            |                      |                  |                  |         |
|--------------------------------------|---|-----|----|------|------|-----|------------|------------|----------------------|------------------|------------------|---------|
| Outline                              | See the Outline Drawing   |     |    |      |      |     | Net Weight |            | Approximately 1.3 kg |                  |                  |         |
| Absolute Maximum Rating              | Item  | Ef  | tk | ebm  | lb   | ibm | Pi         | $\sigma_L$ | Ta <sup>⑤</sup>      | Tp <sup>②</sup>  | Tc <sup>②</sup>  | storage |
|                                      | Unit  | V   | s  | kV   | mAdc | A   | kW         | —          | °C                   | °C               | °C               | °C      |
|                                      | Max.  | 4.8 | —  | 5.00 | 450  | 1.6 | 2.25       | 4          | 350                  | 180 <sup>③</sup> | 120 <sup>④</sup> | 60      |
|                                      | Min.  | 3.8 | 0  | —    | —    | —   | —          | —          | —                    | —                | —                | -30     |
| Standard Test Condition <sup>①</sup> | 4.4   | 3.0 | —  | 400  | —    | —   | 1.1 MAX    | —          | —                    | —                | —                | —       |

## Test Specification

| Test Item <sup>⑧</sup>   | Test Method ED-1501 | Test Condition <sup>①</sup> | Symbol          | Nominal                     | Limit |      | Unit |
|--------------------------|---------------------|-----------------------------|-----------------|-----------------------------|-------|------|------|
|                          |                     |                             |                 |                             | Min.  | Max. |      |
| *Filament Current        | 4.1.1               | tk=120                      | If              | 14                          | 12.5  | 15.5 | A    |
| Peak Anode Voltage       | 4.3.1               | ⑥                           | ebm             | 4.50                        | 4.30  | 4.70 | kV   |
| Average Output Power (1) | 4.3.3.1             | ⑥                           | Po(1)           | 1260                        | 1200  | 1400 | W    |
| Frequency                | 4.3.4               | ⑥                           | f               | 2460                        | 2445  | 2470 | MHz  |
| *Stability Moding (1)    | 4.3.11.2            | $\sigma_L=2, 3, 4$<br>t=60s | ST              | No Moding                   |       |      | —    |
| Emission Moding (2)      | 4.3.11.3            | Ef=3.0, t≤5s                | Efm             | No Moding                   |       |      | —    |
| Insulation               | 4.2                 | 1kVdc                       | Rpf             | —                           | 1000  | —    | MΩ   |
| Breakdown Voltage        | 4.2                 | 7.1kVac or<br>10kVdc, t=60s | V <sub>BV</sub> | No Abnormality <sup>⑦</sup> |       |      | —    |

2013/ 9/ 3

Unit : mm

## Note

- ① Tp measurement point  
To be measured at the outlet side of air flow.
- ② Tc measurement point
- ③ Ta measurement point
- ④ Adaptable for #250 faston receptacle.

