

MICROWAVE POWER TRANSISTOR

NPN silicon power transistor for use in a common-base, class-C amplifier up to a frequency of 4.2 GHz in CW conditions in military and professional applications.

Features

- Interdigitated structure giving a high emitter efficiency
- Diffused emitter ballasting resistor providing excellent current sharing and withstanding a high VSWR
- Gold metallization realizing a very good stability of the characteristics and excellent life-time
- Multicell geometry giving good balance of dissipated power and low thermal resistance
- An input matching cell improving the input impedance and allowing an easier design of wideband circuits

The transistor is housed in a metal ceramic flange envelope (FO-41B).

QUICK REFERENCE DATA

Microwave performance up to $T_{mb} = 25\text{ }^{\circ}\text{C}$ in a common-base class-C selective amplifier

mode of operation	f GHz	V _{CC} V	P _L W	G _p dB	η_C %	Z _i Ω	Z _L Ω
CW; class-C	4.2	24	≥ 2.5	≥ 5	≥ 28	12 + j35	2.5 - j10

MECHANICAL DATA

Dimensions in mm

FO-41B (see Fig.1).

WARNING

Product and environmental safety – toxic materials

This product contains beryllium oxide. The product is entirely safe provided that the BeO slab is not damaged. All persons who handle, use or dispose of this product should be aware of its nature and of the necessary safety precautions.

After use, dispose of as chemical or special waste according to the regulations applying at the location of the user. It must never be thrown out with general industrial or domestic waste.

