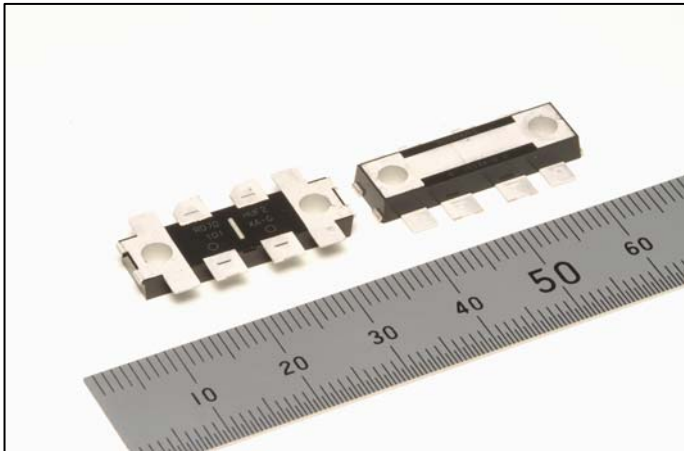


## Product Information

### 12.5 V High Power MOSFET



RD70HUF2/RD35HUF2

High power output and high efficiency and conforms to SMT.

#### Summary

Model	Shipment date	Production
RD70HUF2	July 1, 2010	20,000 pieces/month
RD35HUF2	July 1, 2010	20,000 pieces/month

Commercial 2-way radios are widely used in a variety of fields, including public institutions (e.g. police and fire departments), as well as in airports, taxis and event venues. Given the severe conditions that they are sometimes used in, such as heavy rain or near fire, these radios require a rugged structure and reliable wireless communication capability with high power output.

Meanwhile, manufacture of electronic equipment has mostly been automated by SMT, greatly contributing to the improvement of product quality and production efficiency. Power amplifiers installed in commercial 2-way radios, on the other hand, are usually soldered manually. Mitsubishi Electric's new MOSFETs not only conform to SMT, but also achieve industry top-level power outputs with high drain efficiency<sup>1</sup>.

1: Rate of electricity converted to high frequency waves by amplifiers

#### Features

##### High power output and high efficiency

- RD70HUF2: high power of 75W at UHF and 84W at VHF, suitable for 50 W grade radios
- RD35HUF2: high power of 43W at UHF and 45W at VHF, suitable for 25 W grade radios
- High drain efficiency: 60% or more at UHF, 70% or more at VHF, contributing to the reduction of power consumption

##### Conforms to SMT, taking advantage of reflow soldering

- Molded package enables reflow soldering
- Shipment by packing of tape and reel conforms to SMT placement equipment

##### For the Environment

The models are compliant with Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS).

## Overview

### 【RD70HUF2】

Item	Specifications	
Frequency	450~527MHz	135~175MHz
Output electricity	75W (typ@530MHz)	84W (typ@175MHz)
Drain efficiency	64% (typ@530MHz)	74% (typ@175MHz)
Drain supply voltage (Vds)	12.5V	12.5V
Input electricity	5.5W Idq=1.0A	4.0W Idq=1.0A

### 【RD35HUF2】

Item	Specifications	
Frequency	450~527MHz	135~175MHz
Output electricity	43W (typ@530MHz)	45W (typ@175MHz)
Drain efficiency	60% (typ@530MHz)	72% (typ@175MHz)
Drain supply voltage (Vds)	12.5V	12.5V
Input electricity	3.0W Idq=0.5A	3.0W Idq=0.5A

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