

IGBT, FRD

How to use the PLECS model

Introduction

This document describes the usage and precautions for the PLECS model using an our product combination of RJP6831JWS and RJU6832JWS as an example.

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1. How to use the model

1.1 Library Browser

After the PLECS model is installed, "Renesas Component - date" is added as a category to the library browser as shown in Figure 1-1, and product models can be selected from the subcategory "RJP6831_RJU6832".

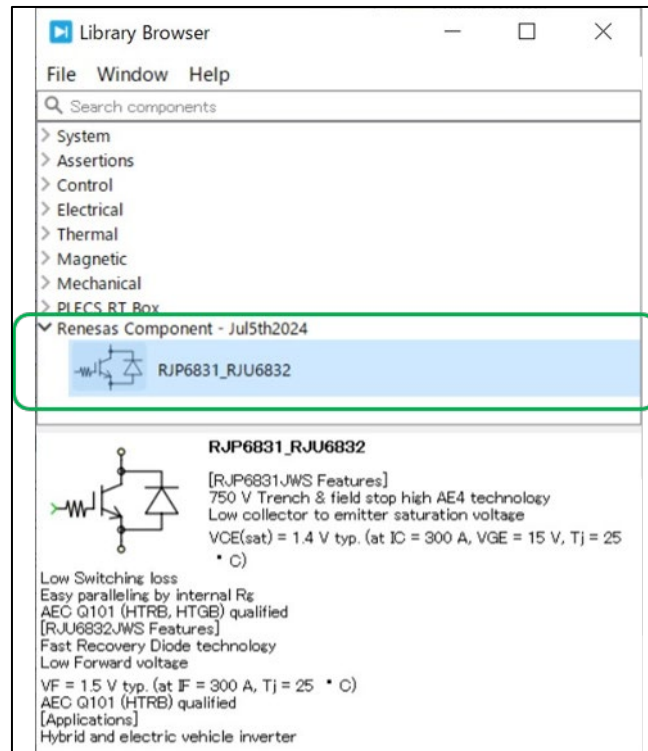


Figure 1-1 Renesas Component Library

2. Precautions for using the model

2.1 Combination of IGBT and FRD

Be sure to use RJP6831JWS and RJU6832JWS in combination as shown in Figure 2-1

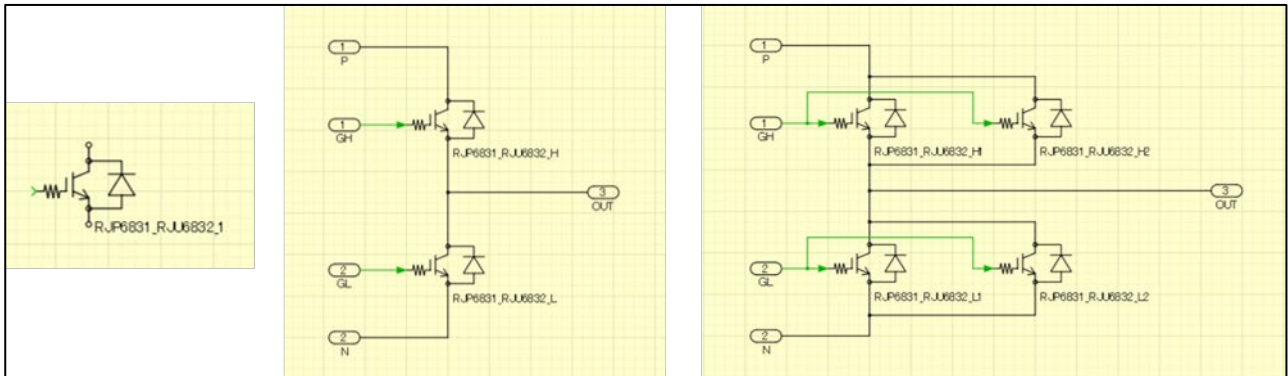


Figure 2-1 The example of model Combinations

2.2 Simulation Parameters

For simulation parameters, the setting of voltage, current, and other simulation conditions, please refer to the datasheet for ratings and recommended values.

The simulation parameters for this device are as follows (Fig. 2-2)

Gate resistance (on)
Gate resistance (off)
Initial Temperature

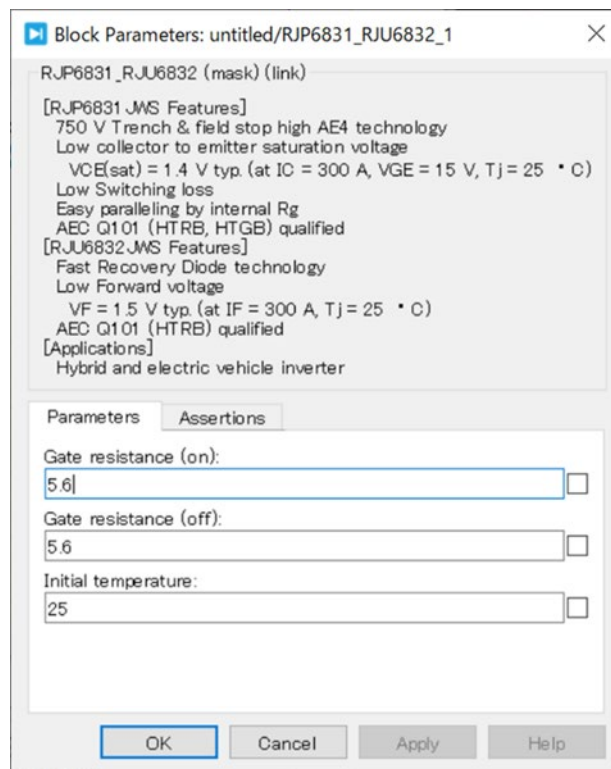


Figure 2-2 Simulation Parameters

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jul.17.24	-	First edition

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Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

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