

Power Semiconductor FRD (Fast Recovery Diode)

# MMK65A5A00\*\*

#### Outline

FRD (Bare chip) utilizes various technologies that we cultivated by analog semiconductor device production and is the product which prepared a lineup of the wide high voltage, high current which can contribute to high efficiency and saving energy.

#### Applications

Industrial Motor Drivers

- Inverter
- Welding
- •UPS

#### **Absolute Maximum Ratings**

Tj=25deg unless otherwise noted.						
Parameter	Symbol	Rating	Unit			
Reverse voltage	VRR	650	V			
Forward current *1)	IF	150	А			
Junction temperature	Tj	-40~+175	°C			

\*1)Forward current is limited by Tj(max) and thermal properties of assembly.

## **Electrical Characteristics**

Tj=25deg unless otherwise noted							
Parameter		Symbol	Specification		Unit	condition	
			Min	Тур	Max	<b>O</b> e	
逆電流		IR	-	-	2	μA	VR=650V
順方向電圧	Tj=25℃	VF	-	1.7	2.2	V	IF=150A
	Tj=175℃		-	1.4	-		1F-150A
逆回復時間 ※参考特性		trr	-	110	-	ns	IF=150A di/dt≒-2000A/µs

This characteristic is when it is incorporated in a mold package or evaluation board.

Depending on the assembly conditions etc., it may not be satisfied.

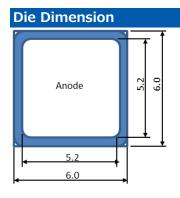
Please note that it is not a guaranteed value.

## Features

- ① Fast Recovery Diode
- ② Low forward voltage
- ③ Soft Recovery
- ④ Fast Switching

### **Die Specification**

Item	Value	Unit
Die thickness	280	μm
Die size	6.0x6.0(36.0)	mm
Front metal(AlSi)	6.5	μm
Backside metal(AlSi/Ti/Ni/Au)	0.9	μm



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 Semiconductor Business Division Strategy Engineering Department
 tel:+81-46-230-3470

Any products mendored this leaner are subject to any mountation in their appearance and others for
 The details listed here are not a guarantee of the individual products at the time of ordering.

When using the products, you will be asked to check their specifications.

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## Feb 2022 Rev.0

MR-Series 650V / 150A

(C) (C) Cathode (A) (A) Anode

PRELIMINARY