



# PRELIMINARY

(C) Cathode

(A) Anode

(C) **Q** 

Power Semiconductor FRD (Fast Recovery Diode)

# **MMKC5A5F00\*\***

# 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=25℃ unless otherwise noted.

Parameter	Symbol	Rating	Unit
Reverse voltage	VRR	1250	V
Forward current *1)	IF	150	Α
Junction temperature	Tj	-40~+175	°C

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

# **Electrical Characteristics**

Tj=25℃ unless otherwise noted.								
Parameter		Symbol	Specification		Unit	condition		
			Min	Тур	Max			
Reverse current		IR	-	-	18	μA	VR=1250V	
Forward voltage	Tj=25℃	VF	-	1.70	2.10	V	IF=150A	
	Tj=150℃		-	1.70	-			
	Tj=175℃		-	1.65	-			
Recovery time *Reference characteristics		trr	-	125	-	ns	IF=150A di/dt≒-4400A/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.

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https://mtm-sec.mitsumi.co.jp/web/ic/

## Features

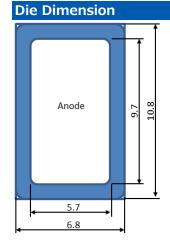
Fast Recovery Diode

MI-Series 1250V / 150A

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

# **Die Specification**

Item	Value	Unit
Die thickness	120	μm
Die size	6.8x10.8(73.4)	mm
Front metal(AlSi)	6.5	μm
Backside metal(AlSi/Ti/Ni/Au)	1.45	μm



Any products mentioned this leaflet are subject to any modification in their appearance and others for improvements without p rior notification.

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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.

MinebeaMitsumi

Passion to Create Value through Difference

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