



PRELIMINARY

(C) Cathode

(A) Anode

(C) **Q**

Power Semiconductor FRD (Fast Recovery Diode)

MMKC5A0F00**

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.

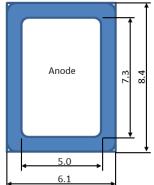
Parameter	Symbol	Rating	Unit
Reverse voltage	VRR	1250	V
Forward current *1)	IF	100	Α
Junction temperature	Tj	-40~+175	°C

*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	-	-	12	μA	VR=1250V	
Forward voltage	Tj=25℃	VF	I	1.70	2.10	V		
	Tj=150℃		-	1.70	-		IF=100A	
	Tj=175℃		-	1.65	-			
Recovery time *Reference characteristics		trr	-	105	-	ns	IF=100A di/dt≒-3400A/µs	

Die Dimension



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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Mitsumi

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

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

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

The details listed here are not a guarantee of the individual products at the time of ordering.

Features

Fast Recovery Diode

MI-Series 1250V / 100A

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

Die Specification

Item	Value	Unit
Die thickness	120	μm
Die size	6.1x8.4(51.2)	mm
Front metal(AlSi)	6.5	μm
Backside metal(AlSi/Ti/Ni/Au)	1.45	μm