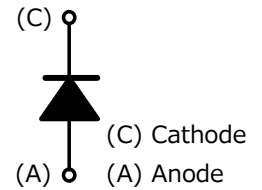


# MMKC5A0F00\*\*



### 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

### Features

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

### Absolute Maximum Ratings

T<sub>j</sub>=25°C unless otherwise noted.

Parameter	Symbol	Rating	Unit
Reverse voltage	VRR	1250	V
Forward current *1)	IF	100	A
Junction temperature	T <sub>j</sub>	-40~+175	°C

\*1)Forward current is limited by T<sub>j</sub>(max) and thermal properties of assembly.

### 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

### Electrical Characteristics

T<sub>j</sub>=25°C unless otherwise noted.

Parameter	Symbol	Specification			Unit	condition
		Min	Typ	Max		
Reverse current	IR	-	-	12	μA	VR=1250V
Forward voltage	T <sub>j</sub> =25°C	-	1.70	2.10	V	IF=100A
	T <sub>j</sub> =150°C	-	1.70	-		
	T <sub>j</sub> =175°C	-	1.65	-		
Recovery time	t <sub>rr</sub>	-	105	-	ns	IF=100A di/dt≒-3400A/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.

### Die Dimension

