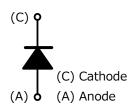


PRELIMINARY

Power Semiconductor FRD (Fast Recovery Diode)

MR-Series 1250V / 100A

MMKC5A0A00**



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

Tj=25deg unless otherwise noted.

Parameter	Symbol	Rating	Unit
Reverse voltage	VRR	1250	V
Forward current *1)	IF	100	Α
Junction temperature	Tj	-40~+175	$^{\circ}$

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

Die Specification

Item	Value	Unit
Die thickness	135	μm
Die size	6.8x6.8(46.2)	mm
Front metal(AlSi)	6.5	μm
Backside metal(AlSi/Ti/Ni/Au)	1.45	μm

Electrical Characteristics

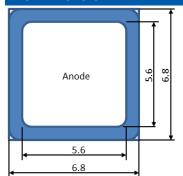
Tj=25deg unless otherwise noted.

Parameter		Symbol	Specification		Unit	condition	
			Min	Тур	Max	OTTIC	condition
Reverse current		IR	-	-	25	μΑ	VR=1250V
Forward voltage	Tj=25℃	VF	-	2.10	2.60	٧	IF=100A
	Tj=175℃		-	1.95	ı		
Recovery time *Reference characteristics		trr	-	110	1	nc	IF=100A di/dt≒-1500A/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







Mitsumi Q Searci

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

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

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