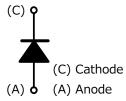


PRELIMINARY

Power Semiconductor FRD (Fast Recovery Diode)

MR-Series 650V / 100A

MMK65A0A00**



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	650	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	280	μm
Die size	5.0x5.0(25.0)	mm
Front metal(AlSi)	6.5	μm
Backside metal(AlSi/Ti/Ni/Au)	0.9	μm

Electrical Characteristics

Tj=25deg unless otherwise noted.

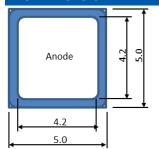
Parameter		Symbol	Specification		Unit	condition	
			Min	Тур	Max	Offic	condition
逆電流		IR	-	-	2	μΑ	VR=650V
順方向電圧	Tj=25℃	VF	-	1.7	2.2	٧	IF=100A
	Tj=175℃		-	1.4	-		
逆回復時間 ※参考特性		trr	1	90	-	ns	IF=100A di/dt≒-2000A/µs

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.

Die Dimension







Mitsumi Q Search

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

Mitsumi Electric CO.,LTD.

Semiconductor Business Division Strategy Engineering Department

tel:+81-46-230-3470

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