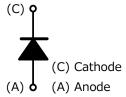


PRELIMINARY

Power Semiconductor FRD (Fast Recovery Diode)

MI-Series 650V / 150A

MMK65A5F00**



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

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

Absolute Maximum Ratings

Tj=25℃ unless otherwise noted.

Parameter	Symbol	Rating	Unit
Reverse voltage	VRR	650	V
Forward current *1)	IF	150	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	80	μm
Die size	7.8x4.9(38.2)	mm
Front metal(AlSi)	4.5	μm
Backside metal(AlSi/Ti/Ni/Au)	0.9	μm

Electrical Characteristics

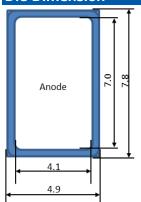
Tj=25℃ unless otherwise noted.

Parameter		Symbol	Specification		Unit	condition	
			Min	Тур	Max	Orne	Corrainon
Reverse current		IR	-	-	3	μΑ	VR=650V
Forward voltage	Tj=25℃	VF	-	1.45	1.85	V	IF=150A
	Tj=150℃		-	1.50	-		
	Tj=175℃		-	1.45	-		
Recovery time *Reference characteristics		trr	-	90	-	ns	IF=150A
							di/dt≒-2150A/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/

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