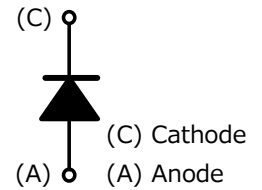


MMKC550F00**



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_j=25°C unless otherwise noted.

Parameter	Symbol	Rating	Unit
Reverse voltage	VRR	1250	V
Forward current *1)	IF	50	A
Junction temperature	T _j	-40~+175	°C

*1)Forward current is limited by T_j(max) and thermal properties of assembly.

Die Specification

Item	Value	Unit
Die thickness	120	μm
Die size	4.5x6.3(28.4)	mm
Front metal(AlSi)	6.5	μm
Backside metal(AlSi/Ti/Ni/Au)	1.45	μm

Electrical Characteristics

T_j=25°C unless otherwise noted.

Parameter	Symbol	Specification			Unit	condition
		Min	Typ	Max		
Reverse current	IR	-	-	6	μA	VR=1250V
Forward voltage	T _j =25°C	-	1.70	2.10	V	IF=50A
	T _j =150°C	-	1.70	-		
	T _j =175°C	-	1.65	-		
Recovery time	t _{rr}	-	85	-	ns	IF=50A 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

