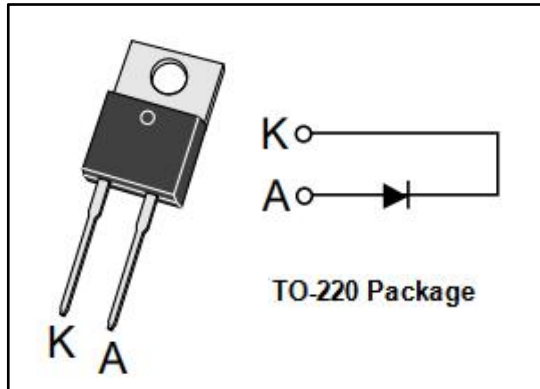


### FEATURES

- High-Frequency Operation
- Temperature Independent Switching Behavior
- Zero Forward Recovery Voltage
- Zero Reverse Recovery Current



### APPLICATIONS

- Motor Drives
- Switch Mode Power Supplies
- Power Factor Correction

### Absolute Maximum Ratings(TC=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RSM</sub> V <sub>DC</sub>	Peak Repetitive Reverse Voltage Surge Peak Reverse Voltage DC Blocking Voltage	1200	V
I <sub>F</sub>	Continuous Forward Current, T <sub>C</sub> =25°C T <sub>C</sub> =135°C T <sub>C</sub> =152°C	31 14.5 10	A
I <sub>FRM</sub>	Repetitive Peak Forward Surge Current, T <sub>C</sub> =25°C, t <sub>p</sub> =10 ms, Half Sine Wave	50	A
I <sub>FSM</sub>	Non-repetitive Peak Surge Current, T <sub>C</sub> =25°C, t <sub>p</sub> =10us, Pulse	250	A
P <sub>D</sub>	Power Dissipation , T <sub>C</sub> =25°C	312	W
T <sub>J</sub>	Junction Temperature	-55~175	°C
T <sub>stg</sub>	Storage Temperature Range	-55~175	°C

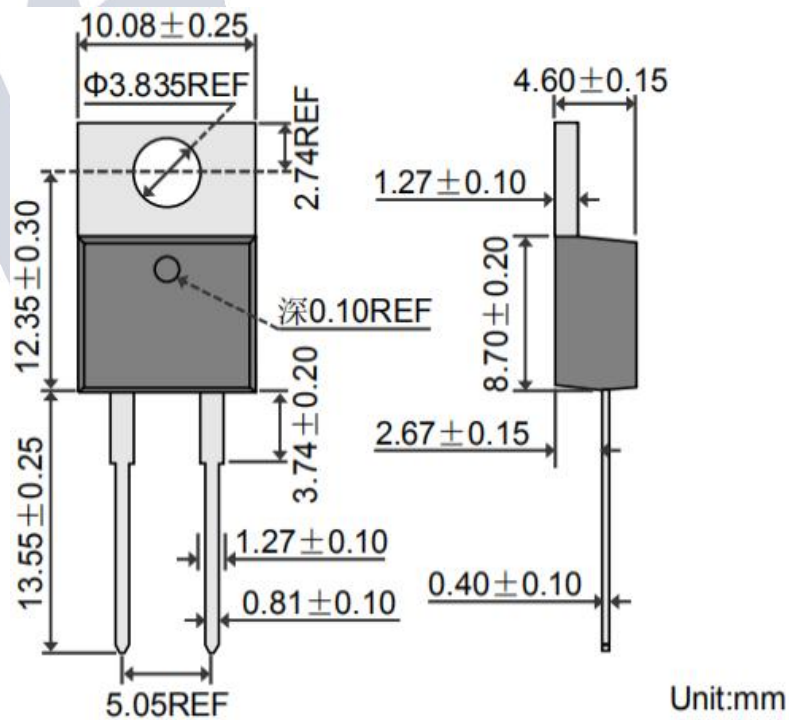
**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.48	°C/W

**ELECTRICAL CHARACTERISTICS**

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 10A ; T <sub>C</sub> = 25°C	1.8	V
		I <sub>F</sub> = 10A ; T <sub>C</sub> = 175°C	3.0	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current	V <sub>R</sub> =1200V, T <sub>C</sub> = 25°C	0.2	mA
		V <sub>R</sub> =1200V, T <sub>C</sub> = 150°C	1.0	mA

**Package Dimensions (UNIT: MM):**





**ISCD7005**  
**eq C2D10120A**

**SiC Schottky DIODE**

### **Product Disclaimer**

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