

# UNISONIC TECHNOLOGIES CO., LTD

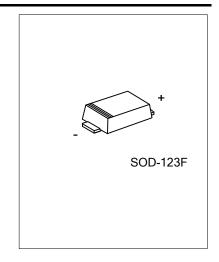
RS1010FL **Preliminary DIODE** 

## SURFACE MOUNT FAST DIODE

#### DESCRIPTION

The UTC RS1010FL is a surface mount fast diode, it uses UTC's advanced technology to provide customers with fast switching and low reverse leakage, etc.

The UTC RS1010FL is suitable for surface mounted applications.



#### **FEATURES**

- \* Fast switching
- \* Low profile package
- \* Low reverse leakage

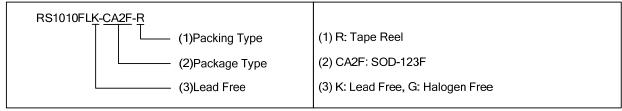
### **SYMBOL**



#### **■ ORDERING INFORMATION**

Ordering Number		Doolsono	Pin Assignment		Doolsing	
Lead Free	Halogen Free	Package	1	2	Packing	
RS1010FLK-CA2F-R	RS1010FLG-CA2F-R	SOD-123F	K	Α	Tape Reel	

Note: Pin Assignment: A: Anode, K: Cathode



#### MARKING INFORMATION

PACKAGE	MARKING
SOD-123F	RAF K: Lead Free G: Halogen Free

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#### ABSOLUTE MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage		1000	<b>V</b>
RMS Voltage		700	<b>V</b>
DC Blocking Voltage	$V_{DC}$	1000	<b>V</b>
Average Forward Rectified Current Derate above T <sub>C</sub> =110°C	I <sub>F(AV)</sub>	1.0	Α
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	30	Α
Junction Temperature	$T_J$	-55~+150	°C
Storage Temperature	$T_{STG}$	-55~+150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

#### **■ THERMAL DATA**

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	$\theta_{JA}$	200	°C/W

#### **■ ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

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PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =0.7A			1.15	V
		I <sub>F</sub> =1.0A			1.3	V
DC Reverse Current at Rated DC Blocking		T <sub>J</sub> =25°C			1.0	μΑ
Voltage	IR	T <sub>J</sub> =125°C			50	μΑ
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>rr</sub> =0.25A			500	nS
Junction Capacitance	CJ	V <sub>R</sub> =4V, f=1MHz		9		рF

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