



# RS1002FL

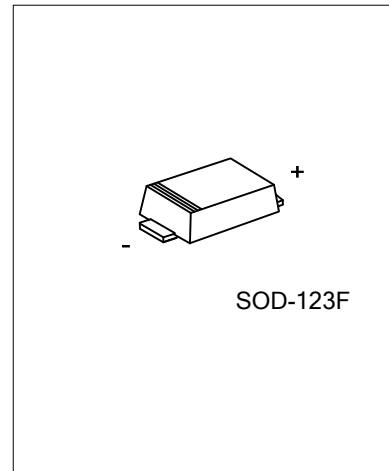
DIODE

## SURFACE MOUNT FAST DIODE

### DESCRIPTION

The UTC **RS1002FL** is a surface mount fast diode, it uses UTC's advanced technology to provide customers with fast switching and low reverse leakage, etc.

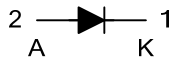
The UTC **RS1002FL** is suitable for surface mounted applications.



### FEATURES

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

### SYMBOL



### ORDERING INFORMATION

Ordering Number	Package	Pin Assignment		Packing
		1	2	
RS1002FLG-CA2F-R	SOD-123F	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>RS1002FLG-CA2F-R</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Green Package</p>	<p>(1) R: Tape Reel</p> <p>(2) CA2F: SOD-123F</p> <p>(3) G: Halogen Free and Lead Free</p>
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### MARKING



### ■ 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	$V_{RRM}$	200	V
RMS Voltage	$V_{RMS}$	140	V
DC Blocking Voltage	$V_{DC}$	200	V
Average Forward Rectified Current Derate above $T_C=110^\circ\text{C}$	$I_O$	1.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30	A
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

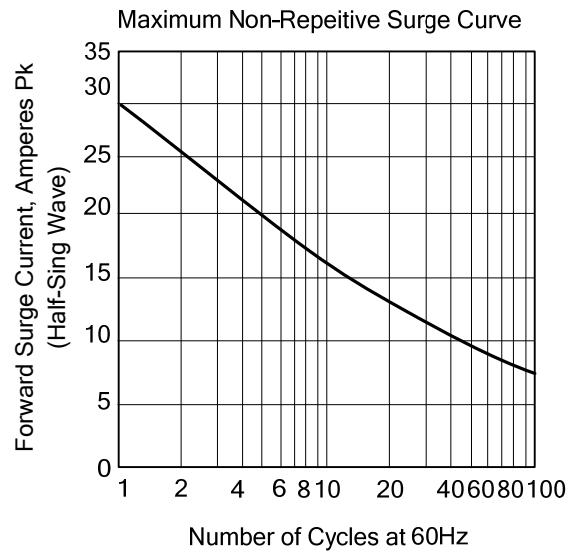
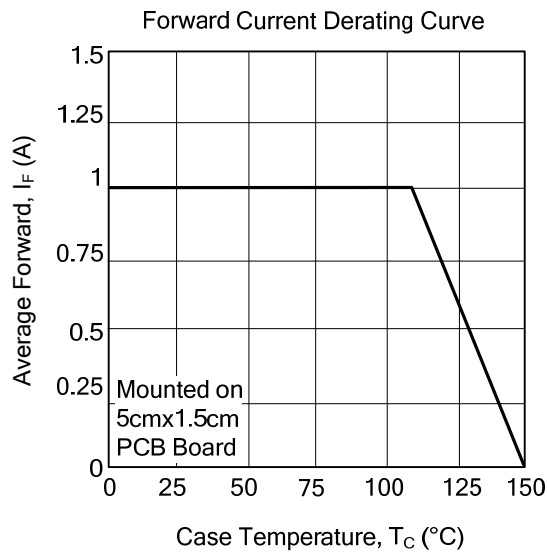
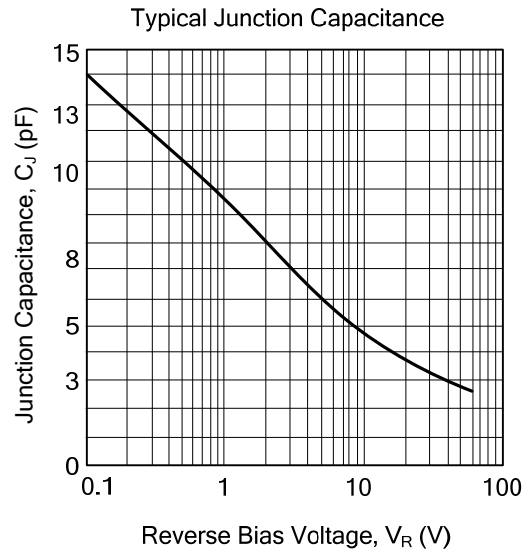
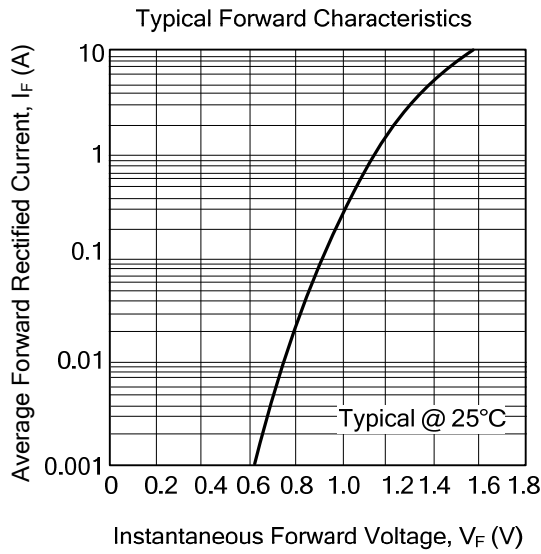
### ■ ELECTRICAL CHARACTERISTICS

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%.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	$V_F$	$I_F=0.7\text{A}$			1.15	V
		$I_F=1.0\text{A}$			1.3	V
DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_J=25^\circ\text{C}$			1.0	$\mu\text{A}$
		$T_J=125^\circ\text{C}$			50	$\mu\text{A}$
Reverse Recovery Time	$t_{rr}$	$I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$			150	nS
Junction Capacitance	$C_J$	$V_R=4\text{V}, f=1\text{MHz}$		9		pF

■ TYPICAL CHARACTERISTICS



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