



RS1006FL

DIODE

SURFACE MOUNT FAST DIODE

DESCRIPTION

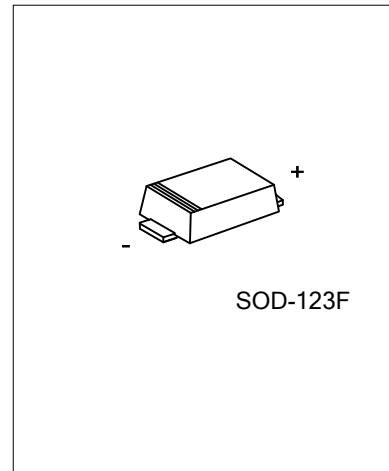
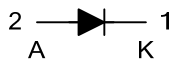
The UTC **RS1006FL** is a surface mount fast diode, it uses UTC's advanced technology to provide customers with fast switching and low reverse leakage, etc.

The UTC **RS1006FL** is suitable for surface mounted applications.

FEATURES

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

SYMBOL



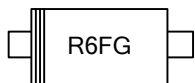
ORDERING INFORMATION

Ordering Number	Package	Pin Assignment		Packing
		1	2	
RS1006FLG-CA2F-R	SOD-123F	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>RS1006FLG-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}	600	V
RMS Voltage	V_{RMS}	420	V
DC Blocking Voltage	V_{DC}	600	V
Average Forward Rectified Current Derate above $T_C=110^{\circ}\text{C}$	$I_{F(AV)}$	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	θ_{JA}	200	°C/W

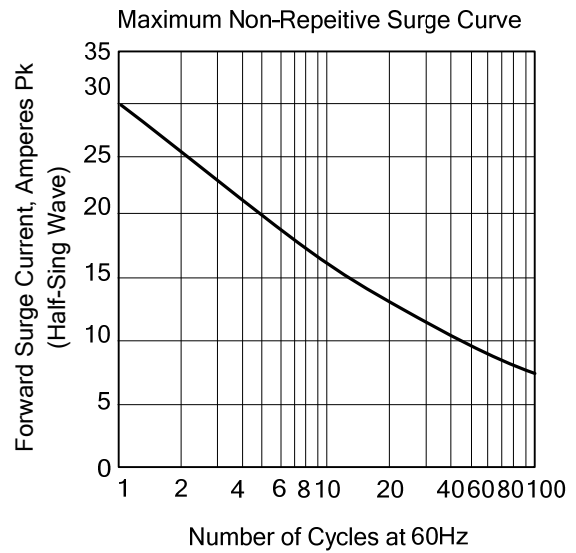
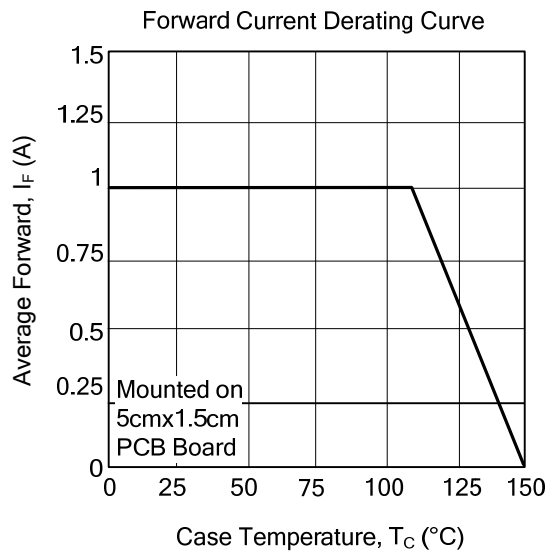
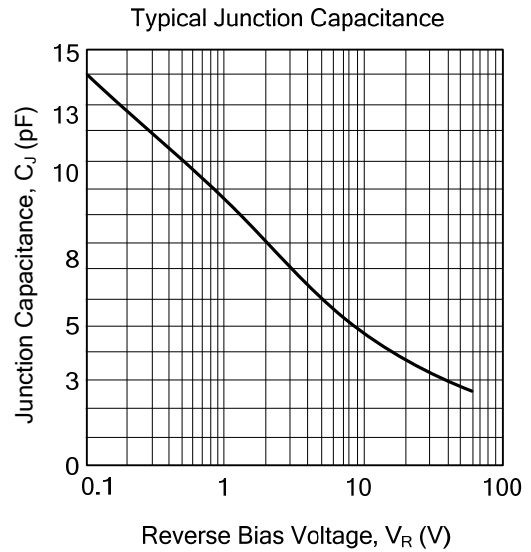
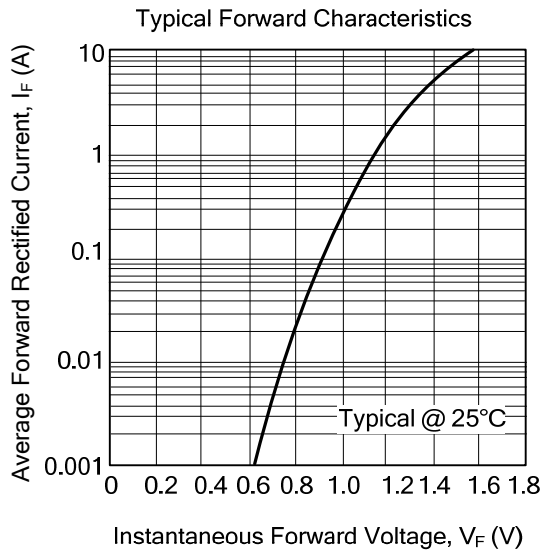
■ ELECTRICAL CHARACTERISTICS

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	$T_J=25^{\circ}\text{C}$			5	μA
		$T_J=125^{\circ}\text{C}$			50	μA
Reverse Recovery Time	t_{rr}	$I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$			250	nS
Junction Capacitance	C_J	$V_R=4\text{V}, f=1\text{MHz}$		9		pF

■ TYPICAL CHARACTERISTICS



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