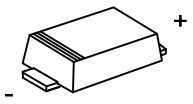
RS1002FL

DIODE

SURFACE MOUNT FAST DIODE



SOD-123F

■ DESCRIPTION

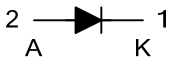
The UTC **RS1002FL** is a surface mount fast diode, it uses UTC's advanced technology to provide customers with fast switching and low reverse leakage, etc.

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

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

■ 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°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	θ_{JA}	200	°C/W

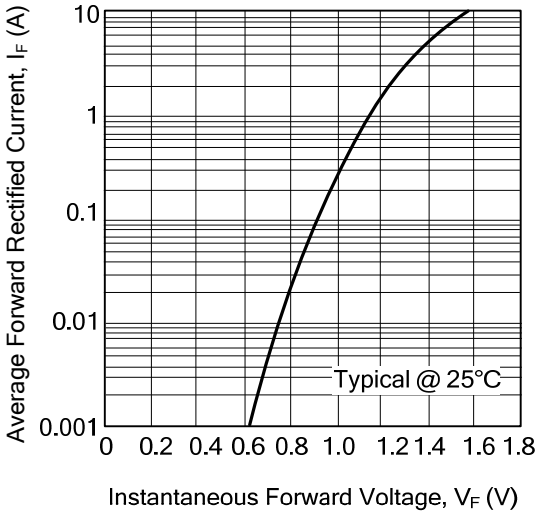
■ ELECTRICAL CHARACTERISTICS

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%.

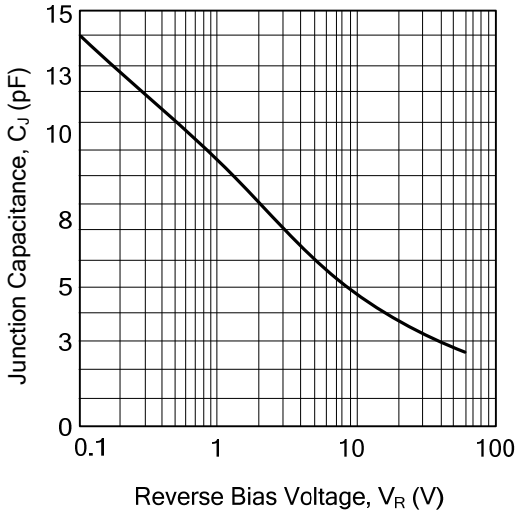
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	V_F	I_F=0.7A			1.15	V
		I_F=1.0A			1.3	V
DC Reverse Current at Rated DC Blocking Voltage	I_R	T_J=25°C			1.0	μA
		T_J=125°C			50	μA
Reverse Recovery Time	t_{rr}	I_F=0.5A, I_R=1A, I_{rr}=0.25A			150	nS
Junction Capacitance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

■ TYPICAL CHARACTERISTICS

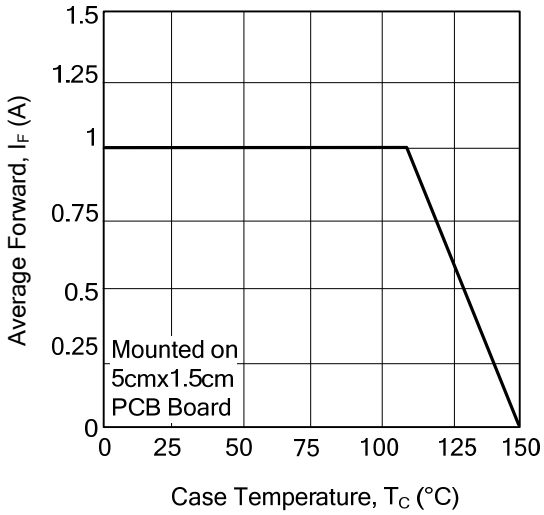
Typical Forward Characteristics



Typical Junction Capacitance



Forward Current Derating Curve



Maximum Non-Repeitive Surge Curve