



# SK36

**DIODE**

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

■ **DESCRIPTION**

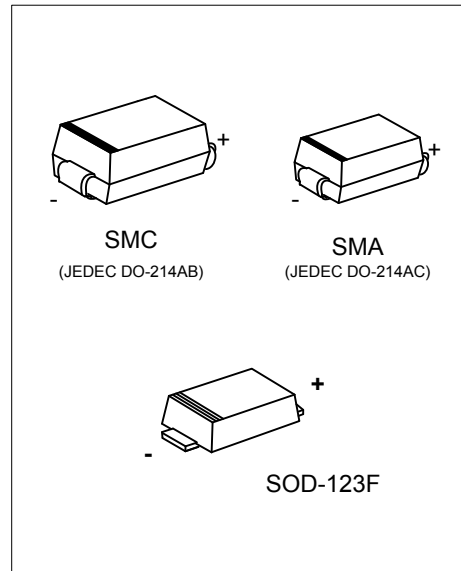
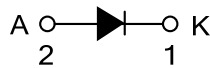
The UTC **SK36** is a Schottky Rectifier with high current capacity, ultra low thermal resistance, Low reverse leakage and low forward voltage.

The UTC **SK36** is suitable for surface mount applications.

■ **FEATURES**

- \* High Current Capability
- \* Low Forward Voltage
- \* Low Reverse Leakage

■ **SYMBOL**



■ **ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SK36L-CA2F-R	SK36G-CA2F-R	SOD-123F	K	A	Tape Reel
SK36L-SMA-R	SK36G-SMA-R	SMA	K	A	Tape Reel
SK36L-SMC-R	SK36G-SMC-R	SMC	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>SK36G-CA2F-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) R: Tape Reel (2) CA2F: SOD-123F, SMA: SMA, SMC: SMC (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ **MARKING**

SMA / SMC	SOD-123F
<p>UTC □ □ □ □ → Date Code SK36 □ → L: Lead Free G: Halogen Free</p> <p>Cathode Band for uni-directional Only ←</p>	<p>K36 □ → L: Lead Free G: Halogen Free</p>

■ ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Working Peak Reverse Voltage	$V_{RWM}$	60	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Reverse Voltage	$V_{RMS}$	42	V
DC Blocking Voltage	$V_R$	60	V
Average Rectified Output Current ( $T_C = 105^\circ\text{C}$ )	$I_O$	3.0 (Note 2)	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed On Rated Load	$I_{FSM}$	100	A
Operating Temperature	$T_J$	-65 ~ +125	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-65 ~ +150	$^\circ\text{C}$

Notes: 1. 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.

2. Thermal resistance junction to case mounted on heatsink.

■ THERMAL DATA (Note 1)

PARAMETER		SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	SOD-123F	$\theta_{JL}$	40	$^\circ\text{C/W}$
	SMA		25 (Note 2)	$^\circ\text{C/W}$
	SMC		10 (Note 2)	$^\circ\text{C/W}$

Notes: 1. FR-4 PCB, 2 oz Copper. Minimum recommended pad layout.

2.  $8.0\text{mm}^2$  (0.13mm thick) land pads.

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage at 3.0A (Note 2)	$V_F$	$I_F=3\text{A}$ , $T_C=25^\circ\text{C}$			0.75	V
Instantaneous Reverse Current (Note 2)	$I_R$	Rated DC Voltage, $T_A=25^\circ\text{C}$			0.5	mA
		Rated DC Voltage, $T_A=100^\circ\text{C}$			20	
Typical Total Capacitance (Note2)	$C_T$				300	pF

Notes: 1. Pulse Test: Pulse Width  $\leq 300\mu\text{s}$ , Duty Cycle  $\leq 2.0\%$

2. Measured at 1.0MHz and applied reverse voltage of 4.0V.

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