



**SK56**

Preliminary

**DIODE**

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**

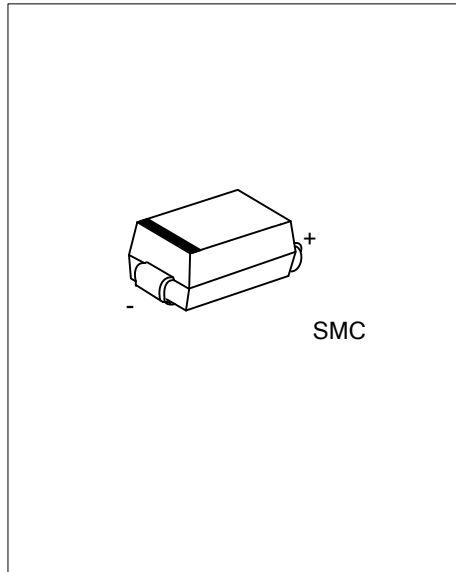
■ DESCRIPTION

The UTC **SK56** is a surface mount schottky barrier rectifier, it uses UTC's advanced technology to provide customers with high efficiency, etc.

The UTC **SK56** is suitable for low voltage high frequency inverters, free wheeling and polarity protection applications.

■ FEATURES

- \* Low power loss
- \* High efficiency
- \* High surge capacity



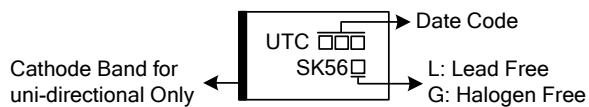
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SK56L-SMC-R	SK56G-SMC-R	SMC	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>SK56L-SMC-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) R: Tape Reel (2) SMC: SMC (3) L: Lead Free, G: Halogen Free and Lead Free</p>
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■ MARKING



### ■ ABSOLUTE MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.  
Resistive or inductive load.

PARAMETER	SYMBOL	RATINGS	UNIT
Recurrent Peak Reverse Voltage	$V_{RRM}$	60	V
RMS Voltage	$V_{RMS}$	42	V
DC Blocking Voltage	$V_{DC}$	60	V
Average Forward Rectified Current at $T_L=75^\circ\text{C}$	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	100	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	$\theta_{JA}$	55	°C/W

Note: Mounted on P.C. Board with 14mm<sup>2</sup> (.013mm thick) copper pad areas.

### ■ ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
Resistive or inductive load.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage (Note 1)	$V_F$	$I_F=5.0\text{A}$			0.75	V
DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_J=25^\circ\text{C}$			1	mA
		$T_J=100^\circ\text{C}$			30	mA

Note: Pulse Test with  $P_W = 300\mu\text{s}$ , 1% Duty Cycle.

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