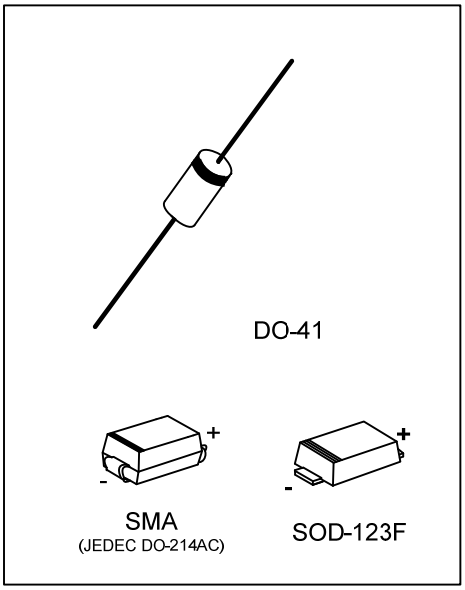
SB160

DIODE

1.0A SCHOTTKY BARRIER RECTIFIER



■ DESCRIPTION

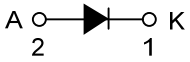
The UTC **SB160** is a Schottky Rectifier with high current capacity and low forward voltage.

The UTC **SB160** is suitable for polarity protection ,low voltage and high frequency inverters and free wheeling applications.

■ FEATURES

* High Current Capability
* Low Forward Voltage

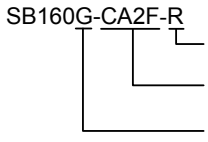
■ SYMBOL



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB160L-CA2F-R	SB160G-CA2F-R	SOD-123F	K	A	Tape Reel
SB160L-SMA-R	SB160G-SMA-R	SMA	K	A	Tape Reel
SB160L-Z41-R	SB160G-Z41-R	DO-41	K	A	Tape Reel
SB160L-Z41-B	SB160G-Z41-B	DO-41	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

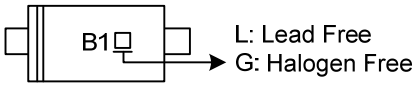
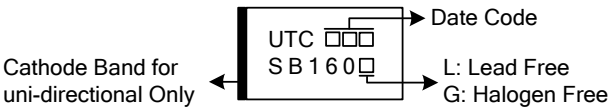
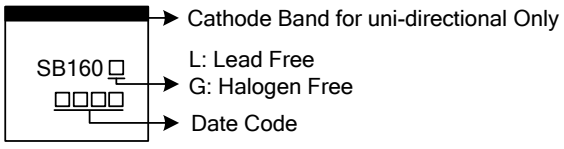


(1) R: Tape Reel, B: Tape Box

(2) CA2F: SOD-123F, SMA: SMA, Z41: DO-41

(3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING

Package	MARKING
SOD-123F	
SMA	
DO-41	

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified.)

PARAMETER		SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage		V_{RRM}	60	V
Working Peak Reverse Voltage		V_{RWM}	60	V
DC Blocking Voltage		V_R	60	V
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	40	A
Average Rectified Output Current		I_O	1.0	A
Peak Reverse Current at Rated DC Blocking Voltage	T_A= 25°C	I_{RM}	0.5	mA
	T_A= 100°C		5.0	mA
Operating Temperature		T_J	-65 ~ +150	°C
Storage Temperature		T_{STG}	-65 ~ +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
Typical Thermal Resistance	SOD-123F	θ_{JL}	25 (Note)	°C/W
	SMA		20 (Note)	°C/W
	DO-41	θ_{JC}	22	°C/W

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

■ ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R=0.50mA	60			V
Forward Voltage Drop	V_{FM}	I_F=1.0A			0.7	V
Peak Reverse Current at Rated DC Blocking Voltage	I_{RM}	T_A=25°C			500	μA
		T_A=100°C			5.0	mA

Note: Pulse width ≤ 300μs, duty cycle ≤ 2%.