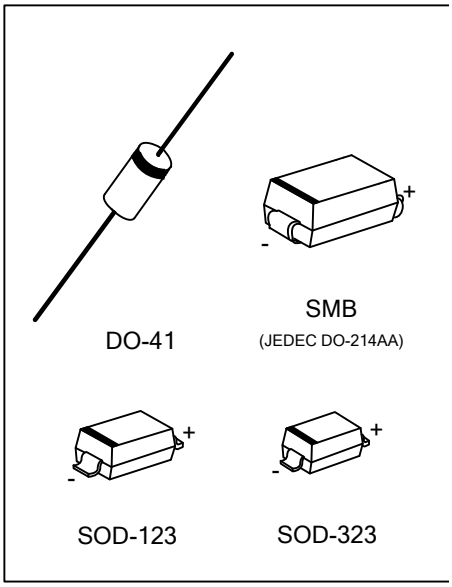
2.0A SCHOTTKY BARRIER RECTIFIER



■ DESCRIPTION

The UTC **SB240** is a Schottky Rectifier with high current capacity and low forward voltage.

The UTC **SB240** is suitable for polarity protection ,low voltage and high frequency inverters and free wheeling applications

■ FEATURES

* High Current Capability
* Low Forward Voltage

■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB240L-SMB-R	SB240G-SMB-R	SMB	K	A	Tape Reel
SB240L-CA2-R	SB240G-CA2-R	SOD-123	K	A	Tape Reel
SB240L-CB2-R	SB240G-CB2-R	SOD-323	K	A	Tape Reel
SB240L-Z41-R	SB240G-Z41-R	DO-41	K	A	Tape Reel

Note: Pin Assignment: A: Anode, K: Cathode

SB240L-SMB-R
(1)Packing Type
(2)Package Type
(3)Lead Free

(1) R: Tape Reel
(2) SMB: SMB, CA2: SOD-123, CB2: SOD-323
Z41: DO-41
(3) L: Lead Free, G: Halogen Free

■ MARKING INFORMATION

PACKAGE	MARKING
SMB	Cathode Band for uni-directional Only; UTC □□□ / S B 2 4 0 □; Date Code; L: Lead Free G: Halogen Free
SOD-123 SOD-323	B2 □; Lead Free

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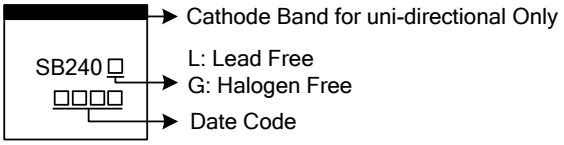
DO-41	 Cathode Band for uni-directional Only SB240□ □□□□ L: Lead Free G: Halogen Free Date Code

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

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V_R	40	V
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current	I_O	2.0	V
Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	I_{FSM}	80	A
Operating Temperature	T_J	-65~+150	°C
Storage Temperature	T_{STG}	-65~+150	°C

Note: 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. Measured at ambient temperature at a distance of 9.5mm from the case.
3. Short duration test pulse used to minimize self-heating effect.

■ THERMAL DATA

PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Ambient	SMB	θ_{JA}	60	°C/W
	SOD-123		200	
	SOD-323		500	
	DO-41		50	

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	I_R=0.50mA	40			V
Forward Voltage Drop (Note 3)	V_{FM}	I_F=2.0A, T_J=25°C			0.50	V
		I_F=2.0A, T_J=100°C			0.45	V
Leakage Current (Note 1)	I_{RM}	V_R=40V, T_J=25°C			0.5	μA
		V_R=40V, T_J=100°C			20	mA

Notes: 1. Short duration pulse test used to minimize self-heating effect.
2. Thermal resistance junction to case mounted on heatsink.
3. Pulse width ≤300μs, duty cycle ≤2%.

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