

**RB501V-40**

Preliminary

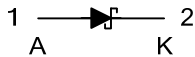
DIODE**SURFACE MOUNT SCHOTTKY
DIODE****DESCRIPTION**

The UTC **RB501V-40** is a surface mount schottky diode, it uses UTC's advanced technology to provide the customers with high switching speed and low forward voltage, etc.

The UTC **RB501V-40** is suitable for automatic insertion, etc.

FEATURES

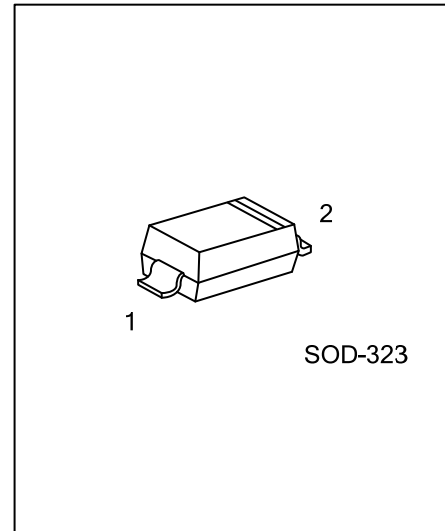
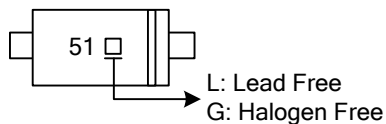
- * High switching speed
- * Low forward voltage

SYMBOL**ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
RB501VL-40-CB2-R	RB501VG-40-CB2-R	SOD-323	A	K	Tape Reel

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

RB501VL-40-CB2-R (1) Packing Type (2) Package Type (3) Lead Plating	(1) R: Tape Reel (2) CB2: SOD-323 (3) L: Lead Free, G: Halogen Free
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MARKING

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Maximum Reverse DC Voltage	V_{RRM}	45	V
Peak Reverse Voltage	V_R	30	V
Maximum Forward Current	$I_{F(AV)}$	0.1	A
Maximum Forward Peak Current (f=60Hz)	I_{FPM}	1	A
Power Dissipation (Note 2)	P_D	0.4	W
Peak Forward Surge Current at t=8.3ms	I_{FSM}	500	mA
Junction Temperature	T_J	-55~+125	°C
Storage Temperature	T_{STG}	-55~+125	°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. FR-5 board=1.0*0.75*0.062 in. Minimum pad layout.

■ THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient (Note 2)	θ_{JA}	300	°C/W

■ ELECTRICAL CHARACTERISTICS ($T_J=25^\circ\text{C}$, unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Leakage Current	I_R	$V_R=10\text{V}$			10	μA
Forward Voltage	V_F	$I_F=10\text{mA}$			0.34	V
		$I_F=100\text{mA}$			0.55	V
Total Capacitance	C_T	$V_R=10\text{V}$, f=1MHz		6		pF

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