

**SCHOTTKY DIODES**

**FEATURES**

- \* High current rectifier Schottky diode
- \* Low voltage, low inductance
- \* For power supply

**MECHANICAL DATA**

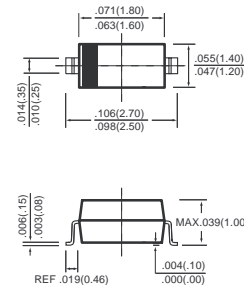
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.004 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



**SOD-323**



**MAXIMUM RATINGS** (@ $T_A=25^\circ\text{C}$  unless otherwise noted)

RATINGS	SYMBOL	RB501V-40	UNITS
Maximum Peak reverse voltage	$V_{RM}$	45	Volts
Maximum DC reverse voltage	$V_R$	40	Volts
Maximum Peak Forward Surge Current	$I_{FSM}$	1	Amps
Mean rectifying current	$I_O$	0.1	Amps
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 125	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS** (@  $T_A = 25^\circ\text{C}$  unless otherwise noted)

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse voltage leakage current ( $V_R=10\text{V}$ )	$I_R$	-	-	30	$\mu\text{A}$
Forward voltage ( $I_F=100\text{mA}$ ) ( $I_F=10\text{mA}$ )	$V_F$	-	-	0.55	V
		-	-	0.34	
Diode Capacitance ( $V_R=10\text{V}, f=1\text{MHz}$ )	$C_T$	-	6	-	pF

## RATING AND CHARACTERISTICS CURVES ( RB501V-40 )

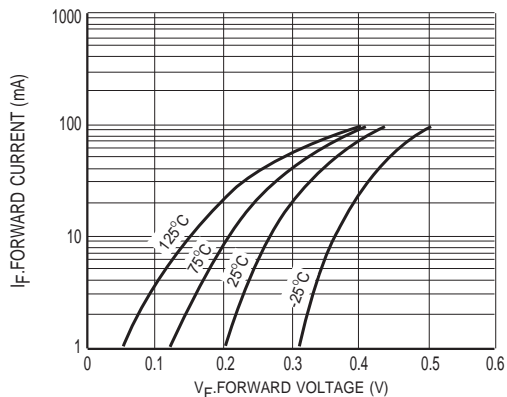


Figure1 Forward characteristics

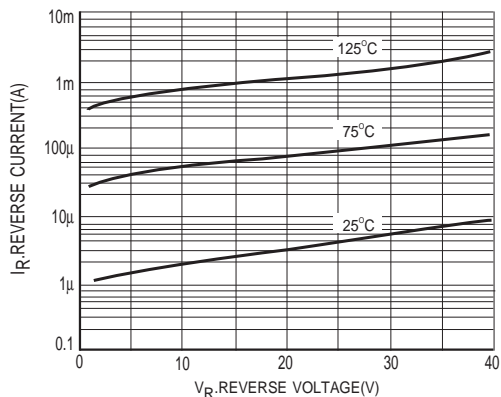


Figure2 Reverse characteristics

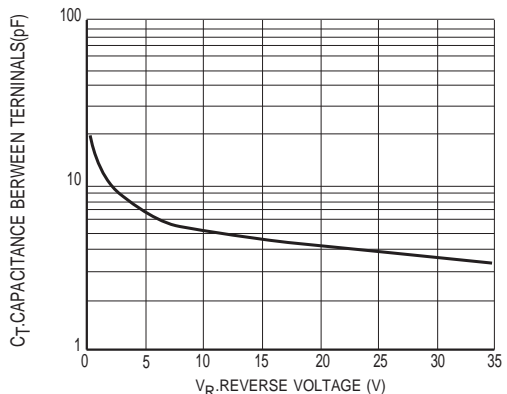


Figure3 Capacitance between terminals characteristics

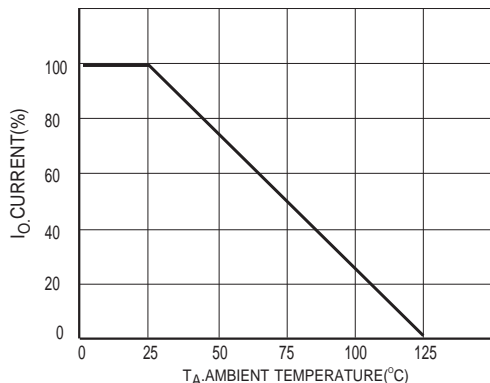


Figure4 Derating curve(mounting on glass epoxy PCBs)

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