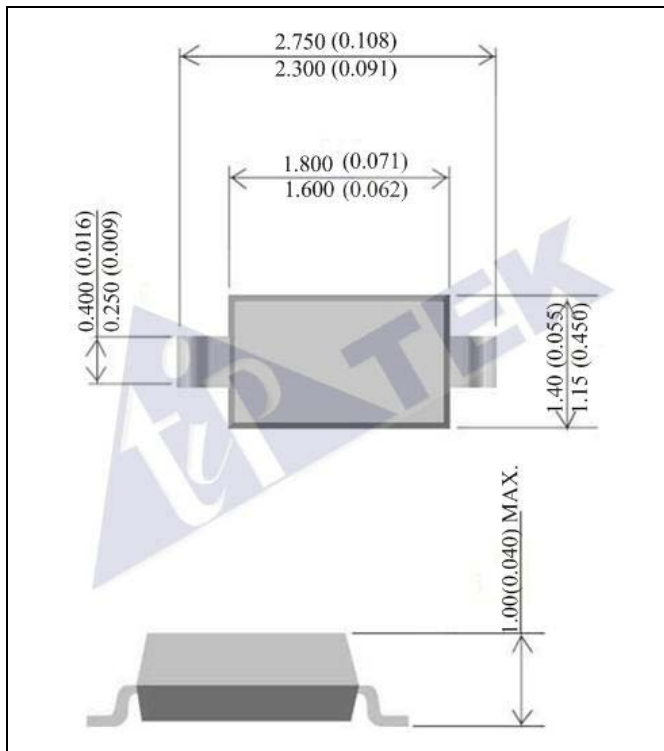


## SURFACE MOUNT SCHOTTKY DIODES



CASE : SOD-323

DIMENSIONS IN MILLIMETERS AND (INCHES)

### FEATURES

- LOW CURRENT RECTIFICATION
- SMALL SURFACE MOUNTING TYPE.
- HIGH RELIABILITY.
- PB-FREE PACKAGE IS AVAILABLE.

### MECHANICAL DATA

- CASE : SOD-323, PLASTIC
- APPROX. WEIGHT: 0.00465 GRAM
- Pb Free: RB501V-40  
Halogen Free: RB501V-40-H

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

#### RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.

PARAMETER	SYMBOL	RB501V-40	UNITS
PEAK REVERSE VOLTAGE	$V_{RRM}$	45	V
DC REVERSE VOLTAGE	$V_R$	40	V
MEAN RECTIFYING CURRENT	$I_O$	100	mA
PEAK FORWARD SURGE CURRENT(60Hz 1CYC)	$I_{FSM}$	1.0	A
JUNCTION TEMPERATURE	$T_J$	125	°C
STORAGE TEMPERATURE	$T_{STG}$	- 55 TO +125	°C

#### ELECTRICAL CHARACTERISTICS (AT $T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

PARAMETER	SYMBOL	RB501V-40	UNITS
FORWARD VOLTAGE AT $I_F=100\text{mA}$ AT $I_F=10\text{mA}$	$V_F$	MAX 0.55 MAX 0.34	V
REVERSE CURRENT AT $V_R=10\text{V}$	$I_R$	MAX 30	$\mu\text{A}$
CAPACITANCE BETWEEN TERMINALS AT $V_R=10\text{V}, F=1\text{MHz}$	$C_J$	TYP 6	pF

● **Electrical characteristic curves (Ta = 25°C)**

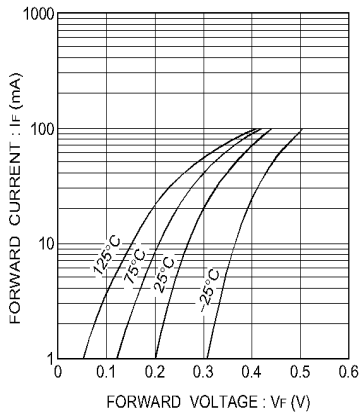


Fig. 1 Forward characteristics

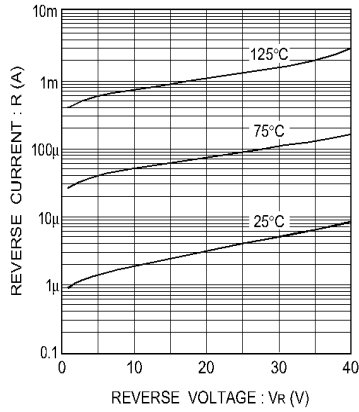


Fig. 2 Reverse characteristics

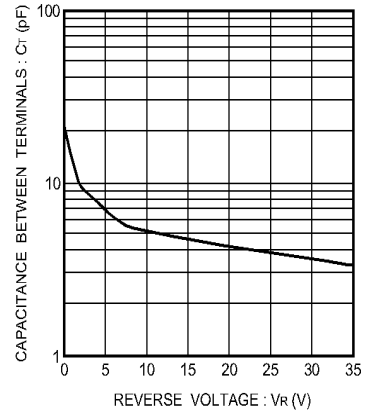


Fig. 3 Capacitance between terminals characteristics

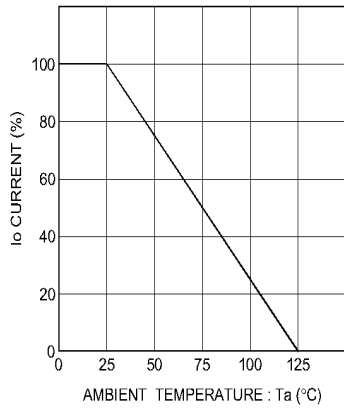


Fig. 4 Derating curve