RB551V-30-EVL

SURFACE MOUNT SCHOTTKY DIODE

VENKEL LTD.

PART NUMBER	PACKAGE	VOLTAGE	POWER	CIRCUIT CONFIGURATION
RB551V-30-□VL E = 7" Embossed T&R (5,000) U = 13" Embossed T&R (12,000)	SOD-323	30V	200mW	SINGLE

FEATURES:

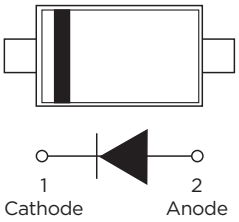
- Ultra low Vf
- Low capacitance for reduced insertion losses

APPLICATIONS:

- Mobile phones and accessories
- Hand-held computers
- High speed switching applications

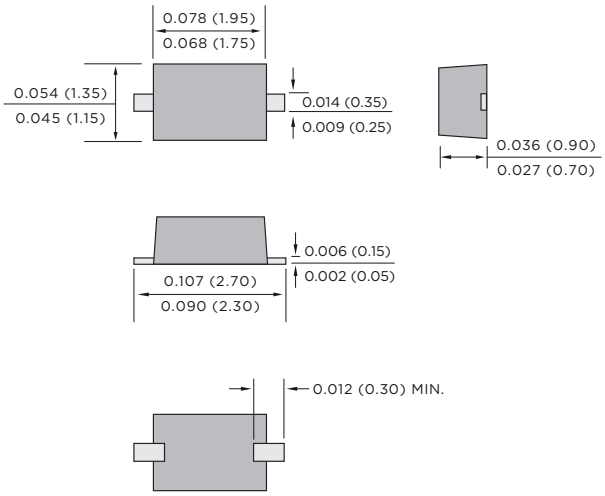
MECHANICAL DATA:

- Case: SOD-323 plastic case.
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0001 ounces, 0.004 grams
- Marking Code: 551



SOD-323

Units: inch (mm)



MAXIMUM RATINGS

T_J=25˚C (unless otherwise noted)

RATING	SYMBOL	VALUE	UNITS
Peak Reverse Voltage I_R=500µA	V_{RM}	30	V
Continuous Reverse Voltage	V_R	20	V
Average Rectified Forward Current	$I_{F(AV)}$	500	mA
Non-Repetitive Peak Forward Current, 60Hz Half Sine-Wave	I_{FSM}	5	A
Total Power Dissipation(NOTE 1)	P_{TOT}	200	mW
Operating Junction Temperature Range	T_J	-55 to +125	˚C
Storage Temperature Range	T_{STG}	-55 to +150	˚C

NOTE: 1. FR-5 Board 1 x 0.75 x 0.062 in.

THERMAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	VALUE	UNITS
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	500	˚C/W

ENVIRONMENTAL INFORMATION

RoHS Status	10 of 10 Compliant
REACH Status	Compliant
Halogen Status	Halogen Free
Conflict Mineral Status	Conflict Mineral Free
Moisture Sensitivity Level (MSL)	1

ELECTRICAL CHARACTERISTICS

T_J=25˚C (unless otherwise noted)

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Forward Voltage (NOTE 2)	V_F	I_F=100mA I_F=500mA	-	-	0.36 0.47	V
Reverse Leakage Current	I_R	V_R=20V	-	-	100	µA
Total Capacitance	C_T	0Vdc Bias, f = 1MHz 10Vdc Bias, f = 1MHz	-	-	85 20	pF

NOTE: 2. Short duration pulse test to avoid self-heating effect.

TYPICAL CHARACTERISTIC CURVES

Fig.1 Typical Forward Characteristics

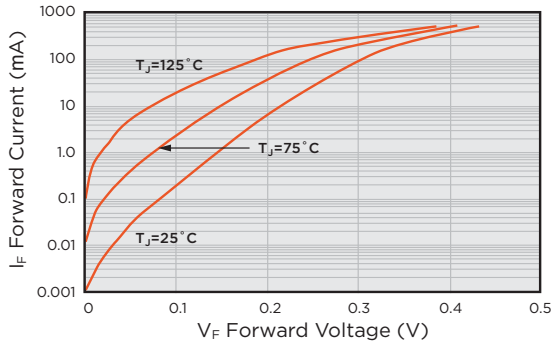


Fig.2 Typical Reverse Characteristics

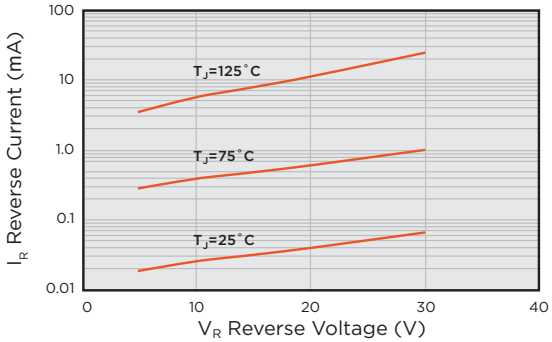


Fig.3 Typical Capacitance

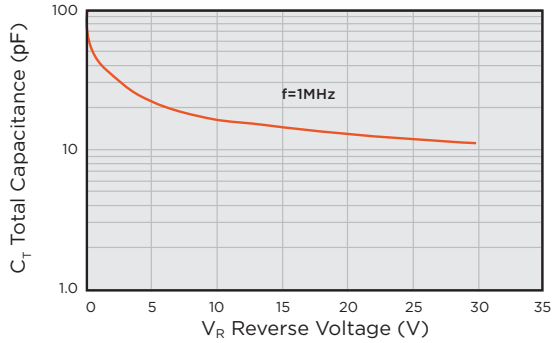
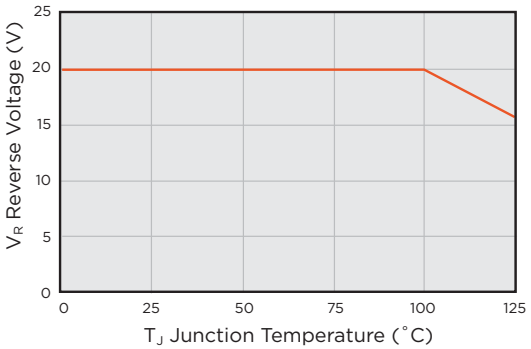
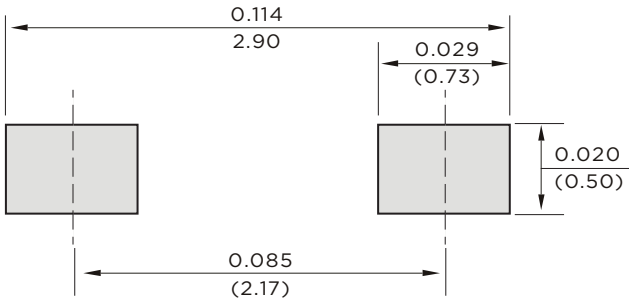


Fig.4 Operating Temperature Derating Curve



MOUNTING PAD LAYOUT

Units: inch (mm)