



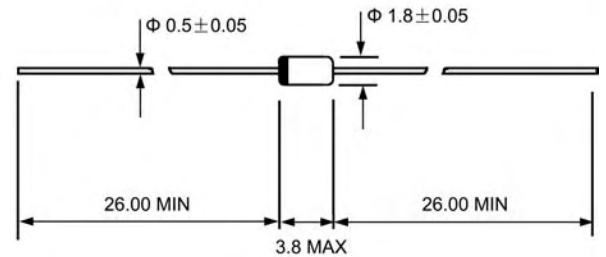
1SS131

Small Signal Switching Diodes

REVERSE VOLTAGE : 80 V

CURRENT: 130 mA

DO - 35(GLASS)



Dimensions in millimeters

Features

- ◇ Glass sealed envelope. (MSD)
- ◇ High reliability

Mechanical Data

- ◇ Case: DO-35, glass case
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.005 ounces, 0.14 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

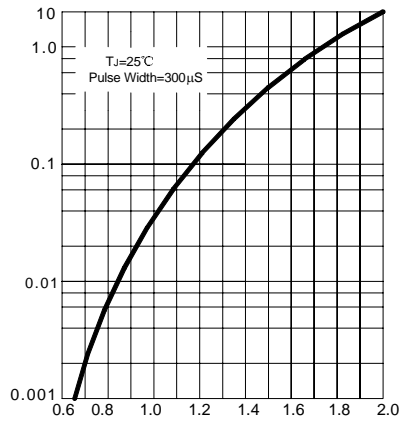
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		1SS131	UNITS
Maximum DC reverse voltage	V_R	80	V
Maximum recurrent reverse voltage	V_{RM}	90	V
Power dissipation	P_{tot}	300	mW
Maximum average forward rectified current	$I_{F(AV)}$	130	mA
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	400	mA
Maximum instantaneous forward voltage @ 100mA	V_F	1.2	V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=150^\circ C$	I_R	0.5 50	μA
Reverse recovery time @ $I_F=10mA, V_R=6V, R_L=50$	t_{rr}	4.0	ns
Operating junction temperature range	T_J	- 55 ---- + 175	$^\circ C$
Storage temperature range	T_{STG}	- 55 ---- + 175	$^\circ C$

Ratings AND Characteristic Curves

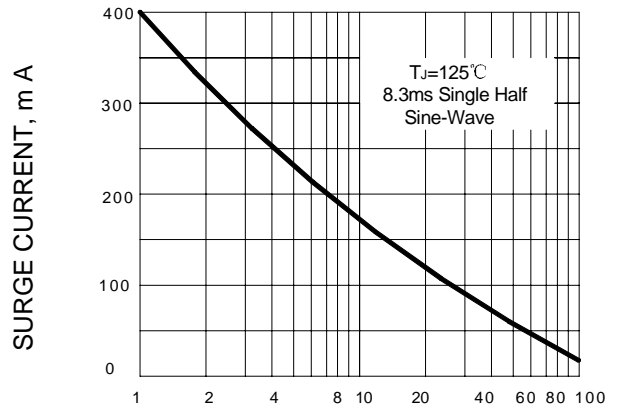
FIG.1 – FORWARD CHARACTERISTICS

INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

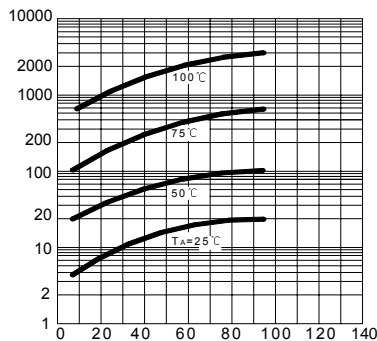
FIG.2 – SURGE CURRENT CHARACTERISTICS



FORWARD VOLTAGE, V

FIG.3 -- REVERSE CHARACTERISTICS

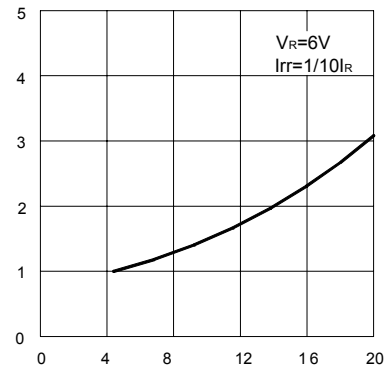
REVERSE CURRENT, nA



FORWARD VOLTAGE, V

FIG.4 – REVERSE RECOVERY TIME CHARACTERISTICS

REVERSE RECOVERY TIME, ns



FORWARD CURRENT, mA

FIG.5 – REVERSE RECOVERY TIME (t_{rr}) MEASUREMENT CIRCUIT

