TAYCHIPST

LOW VF SCHOTTKY BARRIER DIODE

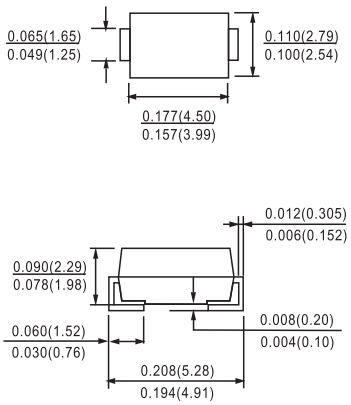
SX33L

30V 3.0A

FEATURES

- Low forward voltage drop, low reverse current
- High Efficiency
- In compliance with EU RoHS 2002/95/EC directives

DO-214AC(SMA)



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0023 ounce, 0.0679 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

ABSOLUTE MAXIMUM RATINGS (T_A= 25°C)

PARAMETER	SYMBOL	LIMITS	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Maximum Average Rectified Forward Current	I_O	3	A
Peak Surge Forward Current	I_{FSM}	75	A
Typical Thermal Resistance (Note 1)	$R_{\Theta JA}$ $R_{\Theta JL}$	100 20	°C/W
Operating Junction Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (T_A= 25°C)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Instantaneous forward voltage (Note 2)	V_F	I_F=1A I_F=2A I_F=3A	T_J=25°C	- - -	0.29 0.32 0.35	0.31 0.35 0.37	V
		I_F=1A I_F=2A I_F=3A	T_J=125°C	- - -	0.17 0.21 0.26	- - -	V
Reverse current	I_R	V_R=21V	T_J=25°C T_J=125°C	-	0.3 90	0.5 -	mA
		V_R=30V	T_J=25°C T_J=125°C	- -	0.8 160	1 -	mA

NOTES:
1. Mounted on P.C. Board with 25mm^2 copper pad areas.
2. Pulse Test with PW =300μsec, 1% Duty Cycle.

RATINGS AND CHARACTERISTIC CURVES SX33L

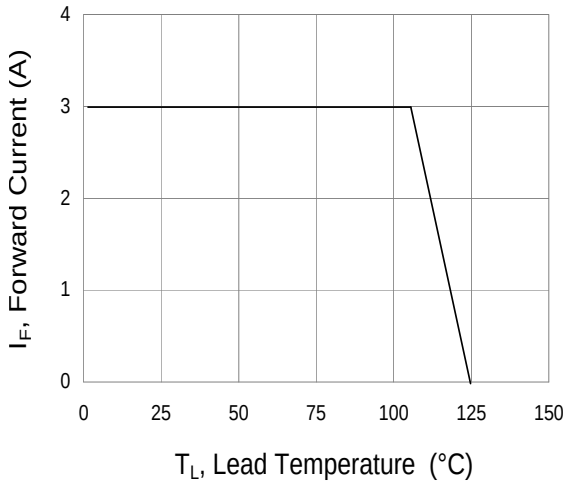


Fig.1 Forward Current Derating Curve

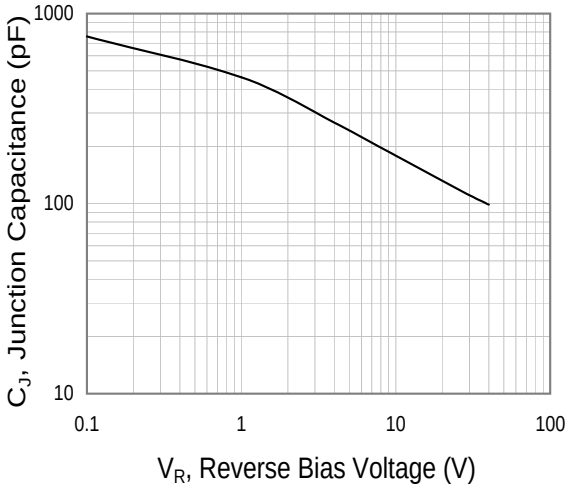


Fig.2 Typical Junction Capacitance

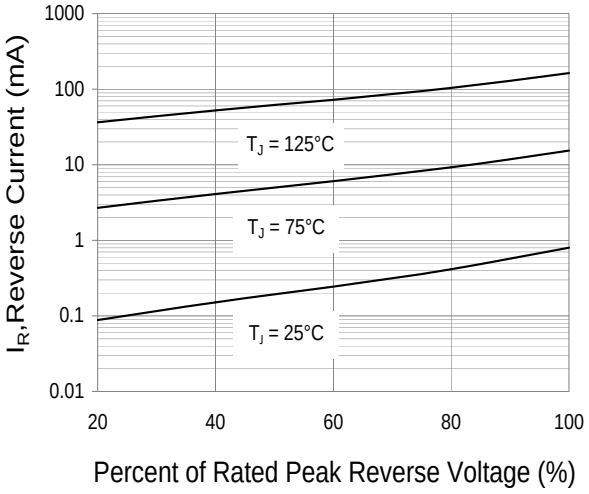


Fig.3 Typical Reverse Characteristics

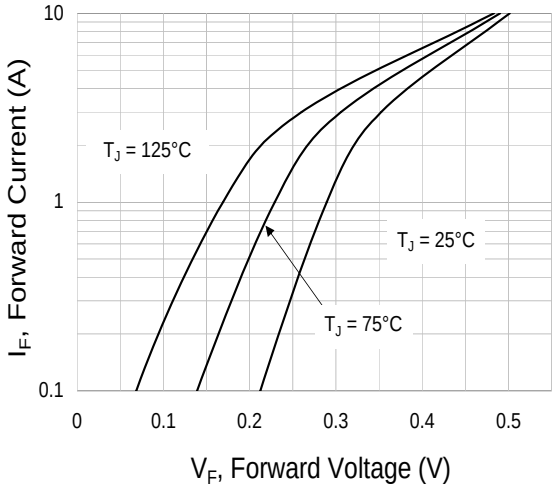


Fig.4 Typical Forward Characteristics