

RSX101VA-30

Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 30V Forward Current - 1.0A

FEATURES

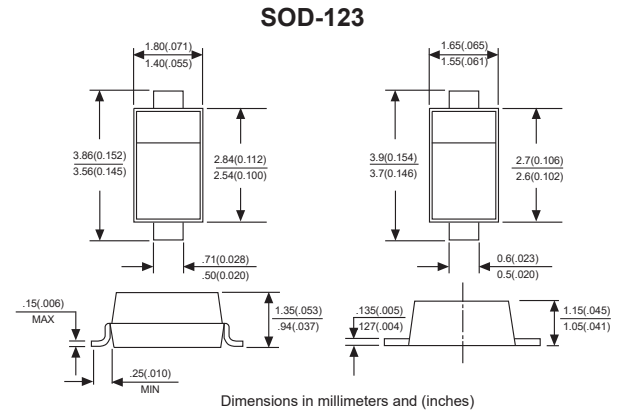
For use in low voltage, high frequency inverters
Free wheeling, and polarity protection applications

MECHANICAL DATA

Case: Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols marked on case



Maximum ratings and electrical characteristics, Single diode @ $T_A=25^{\circ}\text{C}$

PARAMETER	SYMBOLS		UNITS
Peak repetitive peak reverse voltage	V_{RRM}	30	V
Working peak reverse voltage	V_{RWM}		
DC Blocking voltage	V_R		
RMS Reverse voltage	$V_{R(RMS)}$	21	V
Average rectified output current	I_O	1	A
Peak forward surge current @=8.3ms	I_{FSM}	25	A
Repetitive peak forward current	I_{FRM}	625	mA
Power dissipation	P_d	250	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500	K/W
Storage temperature	T_{STG}	-65 to +150	$^{\circ}\text{C}$
Non-Repetitive peak reverse voltage	V_{RM}	30	V

Electrical ratings @ $T_A=25^{\circ}\text{C}$

PARAMETER	SYMBOLS	Min.	Max.	Unit	Test conditions	
Reverse breakdown voltage	$V_{(BR)}$	30		V	$I_R=1\text{mA}$	
Reverse voltage leakage current	I_R		1	mA	$V_R=30\text{V}$	
Forward voltage	V_F		0.55 0.875	V	$I_F=1\text{A}$ $I_F=3\text{A}$	
Diode capacitance	C_D		120	pF	$V_R=4\text{V}, f=1.0\text{MHz}$	



RSX101VA-30

FIG. 1- FORWARD CURRENT DERATING CURVE

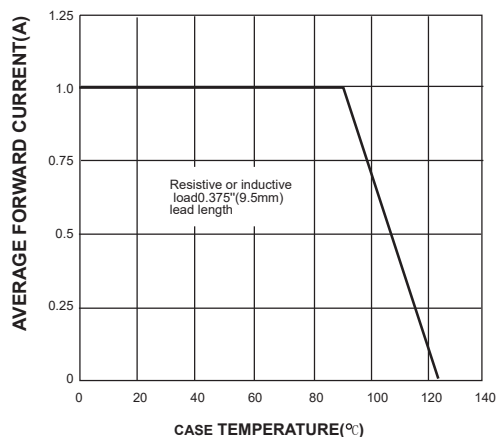


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

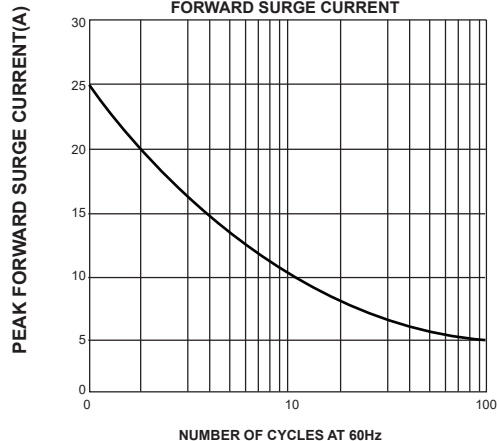


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

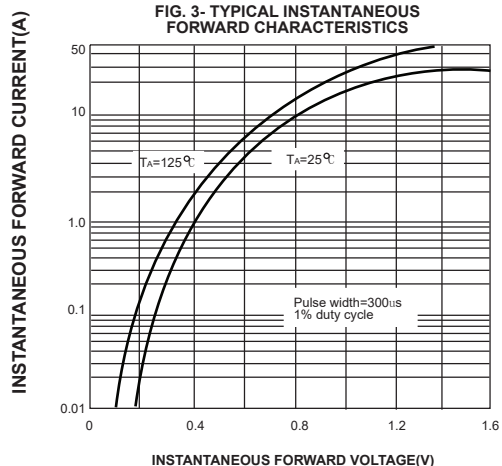


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

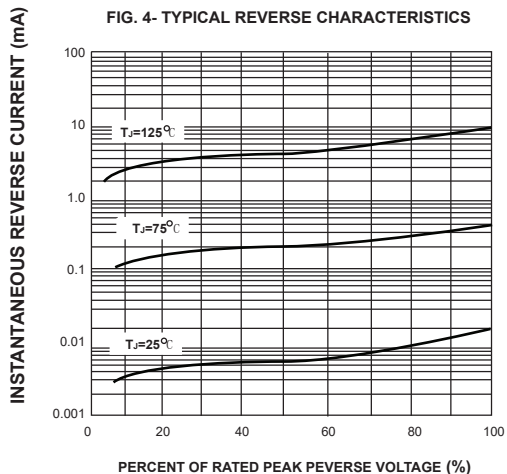


FIG. 5- TYPICAL JUNCTION CAPACITANCE

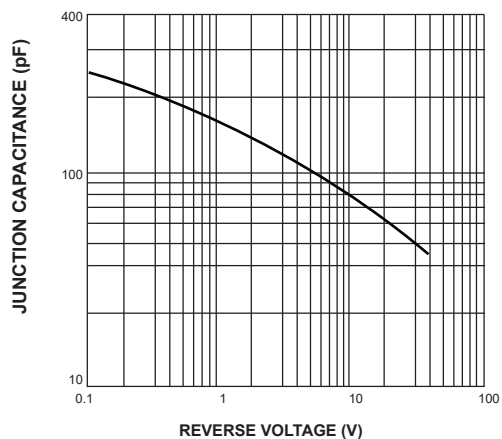


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

