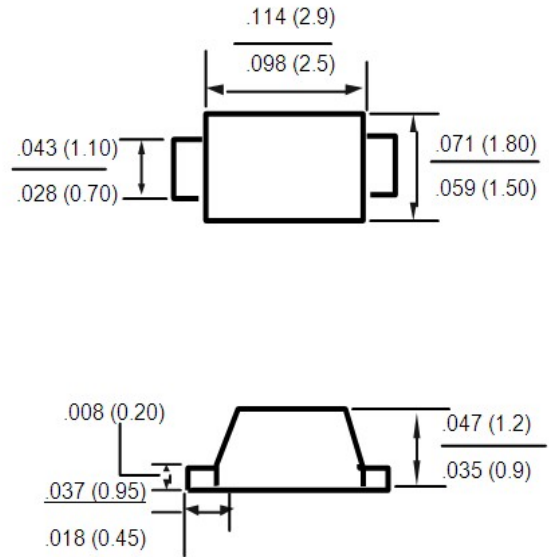


特性(FEATURES):

- ◆ Extremely low V_f .
- ◆ Low stored charge, majority carrier conduction.
- ◆ Low power loss/high efficient
- ◆ For Use In Low Voltage, High Frequency Inverters.
- ◆ Free Wheeling, And Polarity Protection Applications.



MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	RB161M-20	RB160M-30	RB160M-40	Unit
Non-Repetitive Peak reverse voltage	V_{RSM}	24	36	48	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}				
Working Peak Reverse Voltage	V_{RWM}	20	30	40	V
DC Reverse Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified Output Current	I_O	1			A
Peak Forward Surge Current @=8.3ms	I_{FSM}	25			A
Power Dissipation	P_d	500			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500			°C/W

Storage Temperature	T_j, T_{stg}	-65 to +125	°C
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ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test Conditions	MIN	MAX	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_r=1\text{mA}$ RB161M-20	20		V
		RB160M-30	30		
		RB160M-40	40		
Reverse voltage leakage current	I_R	$V_R=20\text{V}$ RB161M-20		1	mA
		$V_R=30\text{V}$ RB160M-30			
		$V_R=40\text{V}$ RB160M-40			
Forward voltage	V_F	RB161M-20 $I_F=1\text{A}$		0.45	V
		$I_F=3\text{A}$		0.75	
		RB160M-30 $I_F=1\text{A}$		0.55	
		$I_F=3\text{A}$		0.875	
		RB160M-40 $I_F=1\text{A}$		0.6	
		$I_F=3\text{A}$		0.9	
Diode capacitance	C_D	$V_R=4\text{V}, f=1\text{MHz}$		120	pF

ORDERING INFORMATION

Type No.	Marking	Package Code
RB161M-20	72	SOD-123FL
RB160M-30	73	SOD-123FL
RB160M-40	74	SOD-123FL

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Fig. 1 - Forward Current Derating Curve

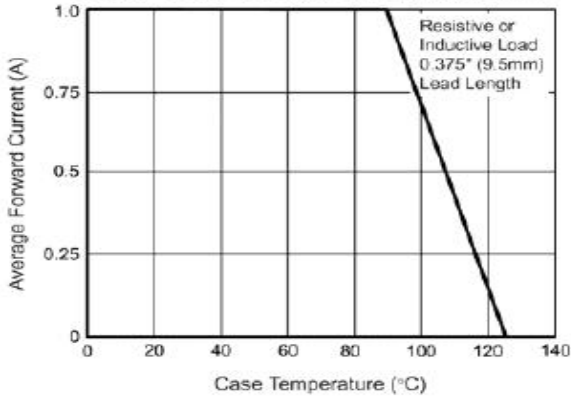


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

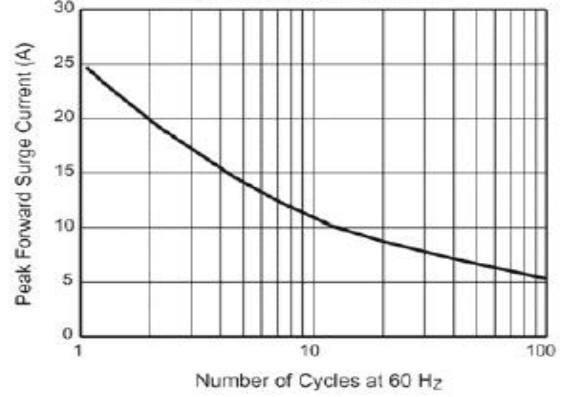


Fig. 3 - Typical Instantaneous Forward Characteristics

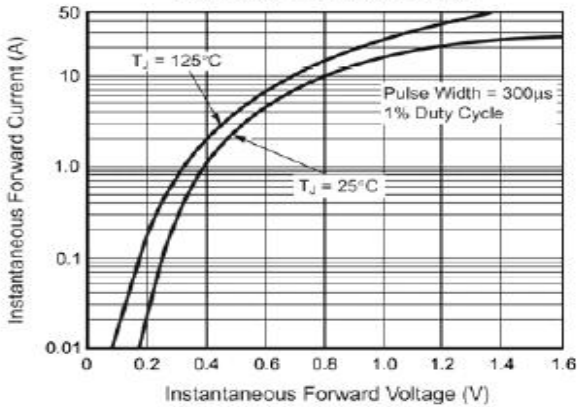


Fig. 4 - Typical Reverse Characteristics

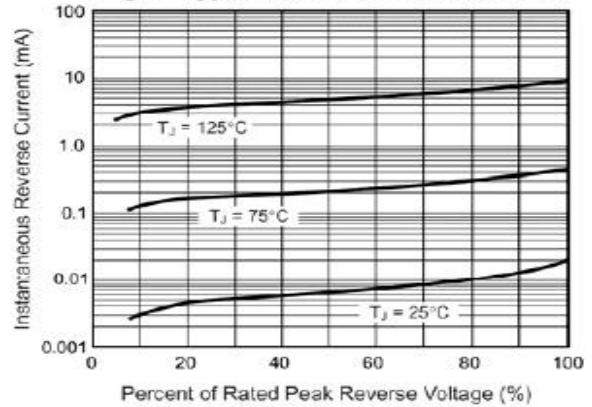


Fig. 5 - Typical Junction Capacitance

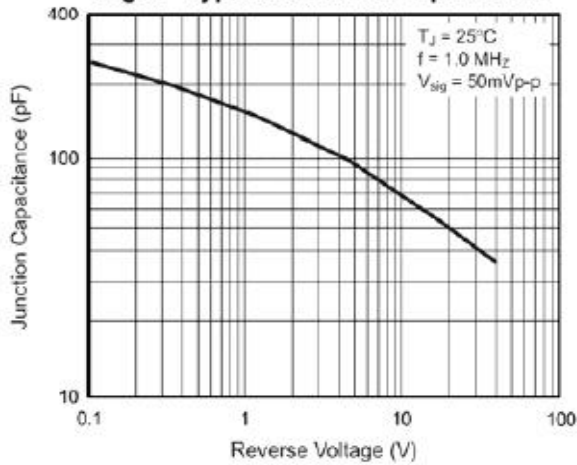


Fig. 6 - Typical Transient Thermal Impedance

