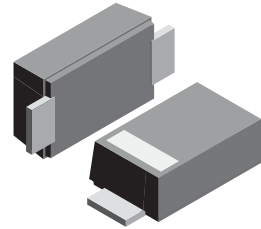


**VOLTAGE RANGE: 30 - 60V**  
**CURRENT: 1.0 A**

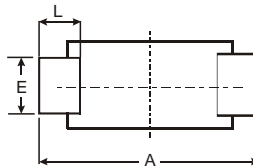
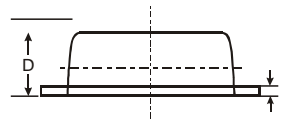
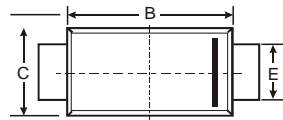
### Features

- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Classification 94V-O



### Mechanical Data

- Case: SOD-123FL  
plastic body over passivated junction
- Terminals : Plated axial leads,
- solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight: 0.0007 ounce, 0.02 grams



SOD-123FL			
Dim	Min	Max	Typ
A	3.50	3.80	3.65
B	2.60	2.90	2.75
C	1.70	1.90	1.80
D	0.09	1.10	1.00
E	0.08	1.10	0.095
H	0.12	0.20	0.16
L	0.07	0.09	0.08
All Dimensions in mm			

### Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

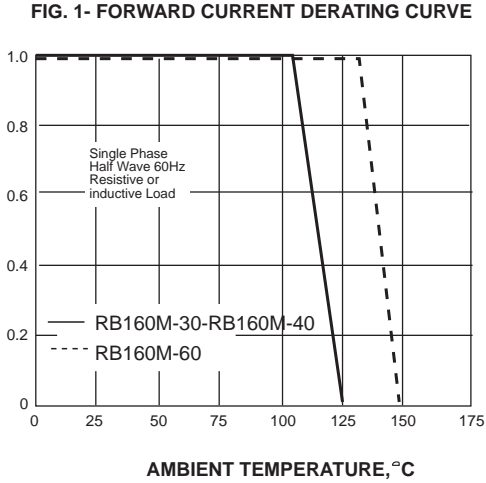
Characteristic	Symbol	RB160M-30	RB160M-40	RB160M-60	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	30	40	60	V
Forward Continuous Current (Note 1)	$I_F$	1.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25			A
Power Dissipation (Note 1)	$P_d$	450			mW
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +125			$^\circ\text{C}$

### Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

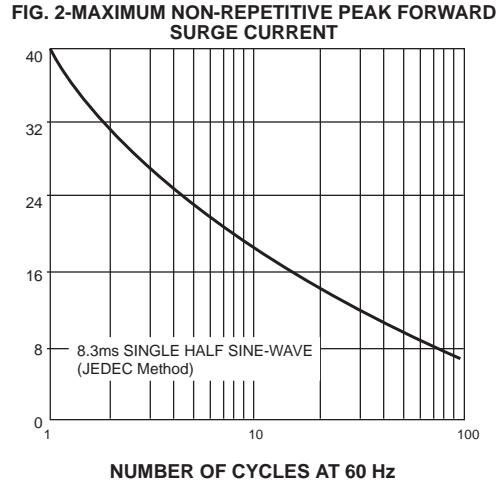
Characteristic	Symbol	RB160M-30	RB160M-40	RB160M-60	Unit
Forward Voltage Drop @ $I_F = 1.0\text{A}$	$V_{FM}$	0.55	0.55	0.70	V
Peak Reverse Leakage Current @ $V_{RRM}$	$I_{RM}$	500			$\mu\text{A}$
Typical Junction Capacitance	$C_j$	50			pF

Note: 1. Valid provided that terminals are kept at ambient temperature.

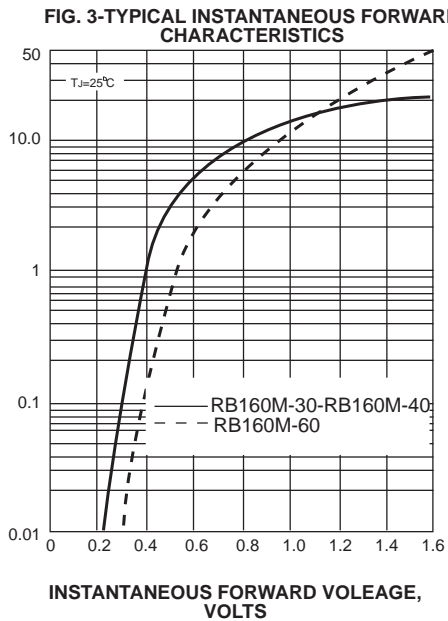
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



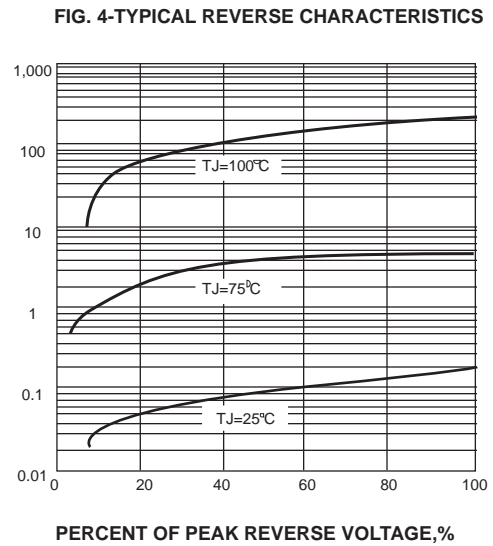
PEAK FORWARD SURGE CURRENT, AMPERES



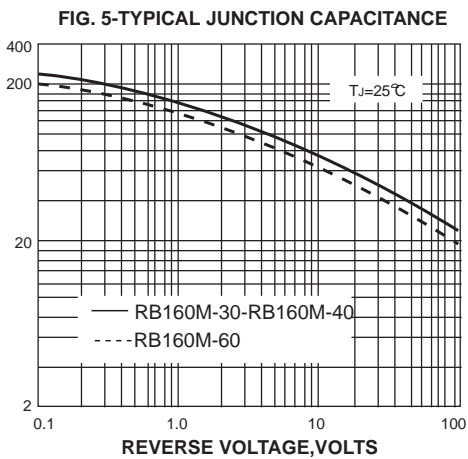
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

