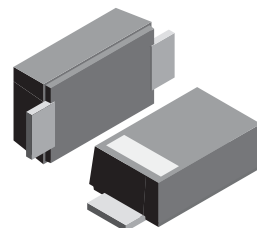


VOLTAGE RANGE: 30 - 60V

CURRENT: 1.0 A

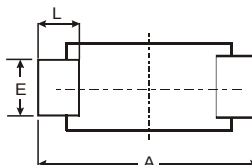
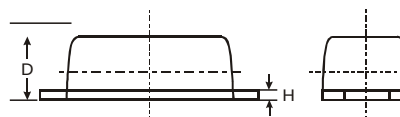
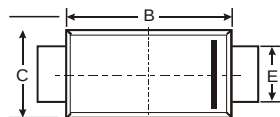
Features

- 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°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			°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	RB160M-30	RB160M-40	RB160M-60	Unit
Forward Voltage Drop @I _F = 1.0A	V _{FM}	0.55	0.55	0.70	V
Peak Reverse Leakage Current @ V _{RRM}	I _{RM}	500			μA
Typical Junction Capacitance	C _j	50			pF

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

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE

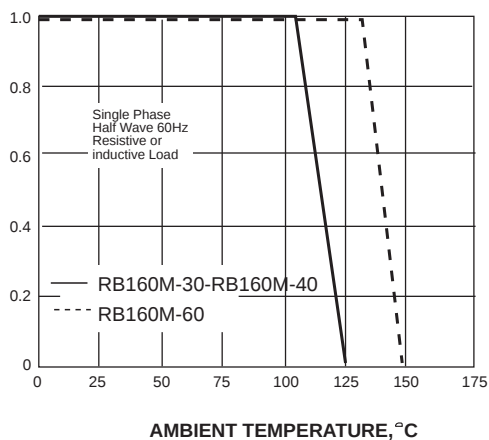


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD
SURGE CURRENT

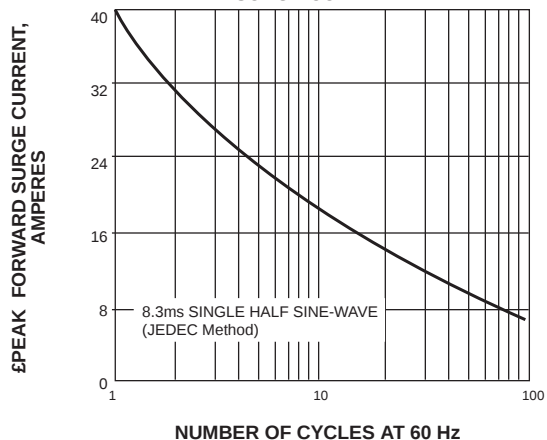


FIG. 3-TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTICS

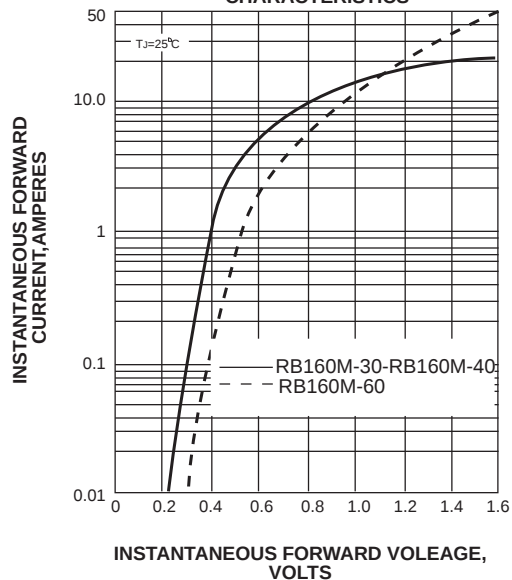


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

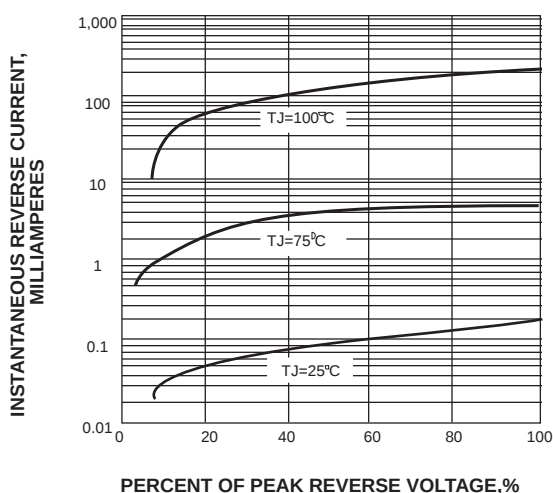


FIG. 5-TYPICAL JUNCTION CAPACITANCE

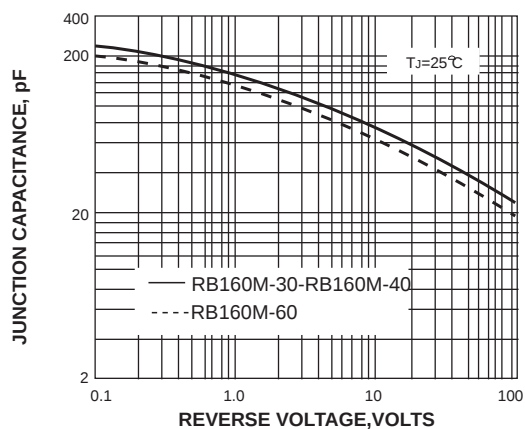


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

