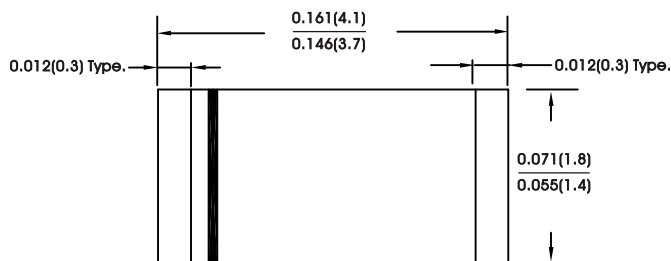


## SCHOTTKY BARRIER RECTIFIERS

## MINI/SOD-123

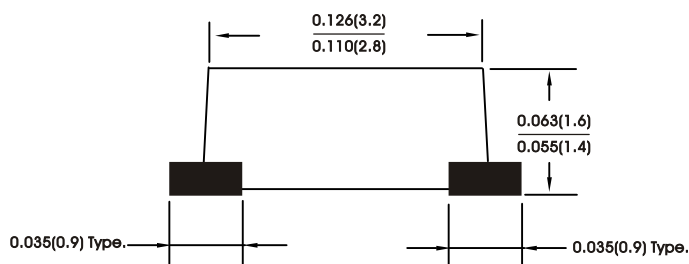
## FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0 Utilizing flame retardant epoxy molding compound
- Low leakage current
- For surface mounted applications
- Low VF Chlp



## MECHANICAL DATA

Case : JEDEC SOD-123 / MINI SMA molded plastic  
 Terminals : Solder plated, solderable per MIL-STD-750  
 Method 2026  
 Polarity : As marked  
 Mounting Position : Any  
 Weight : 0.04 grams



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase half wave, 60 Hz resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	SL12-M	SL13-M	SL14-M	Units
	Marking	L2	L3	L4	
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	Volts
Maximum average forward rectified current (See fig.1)	$I_{(AV)}$	10			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	$I_{FSM}$	30			Amps
Maximum instantaneous forward voltage (NOTE 1) $I_F = 1A$	$V_F$	0.38	0.40	0.40	Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) $T_A = 25^\circ C$ $T_A = 100^\circ C$	$I_R$	0.5 10			mA
Typical junction capacitance	$C_J$	130			PF
Typical thermal resistance(Per leg)	$R_{th-JA}$	42			$^\circ C/W$
Operating temperature range	$T_J$	-65to+125			$^\circ C$
Storage temperature range	$T_{Stg}$	-55to+150			$^\circ C$

## NOTES:

(1) Pulse test : 300 us pulse width, 1% duty cycle

(2) Measured 1MHZ and applied reverse voltage of 4.0v DC

# RATINGS AND CHARACTERISTIC CURVES SL12-M THRU SL14-M

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

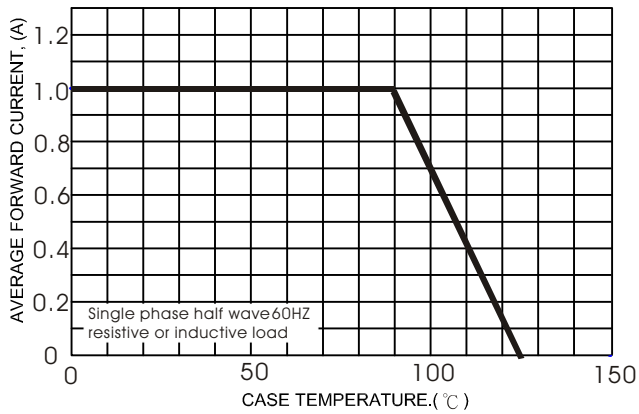


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

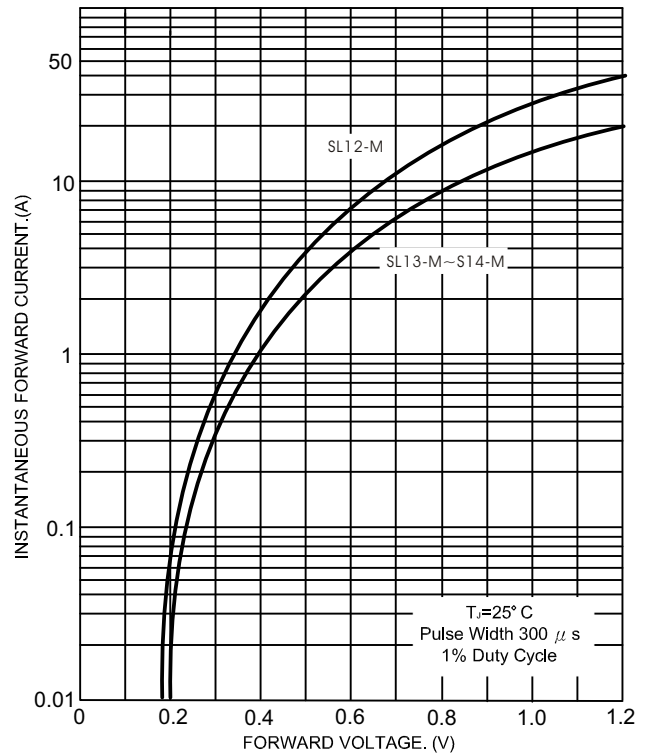


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

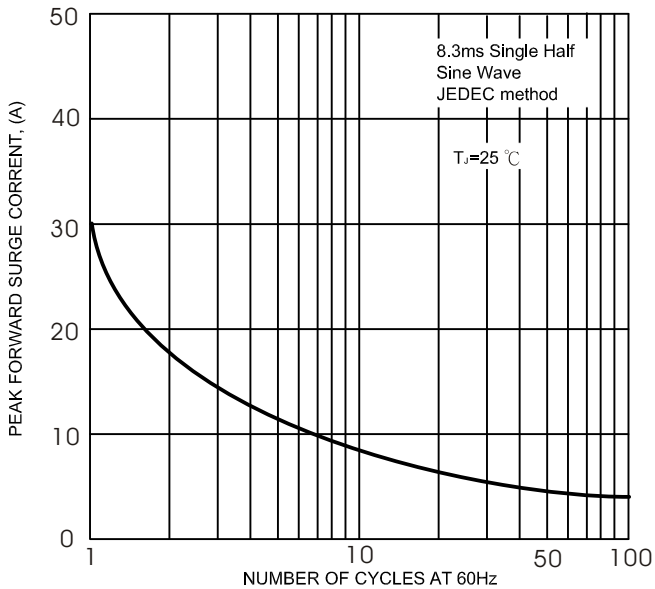


FIG.5- TYPICAL REVERSE CHARACTERISTICS

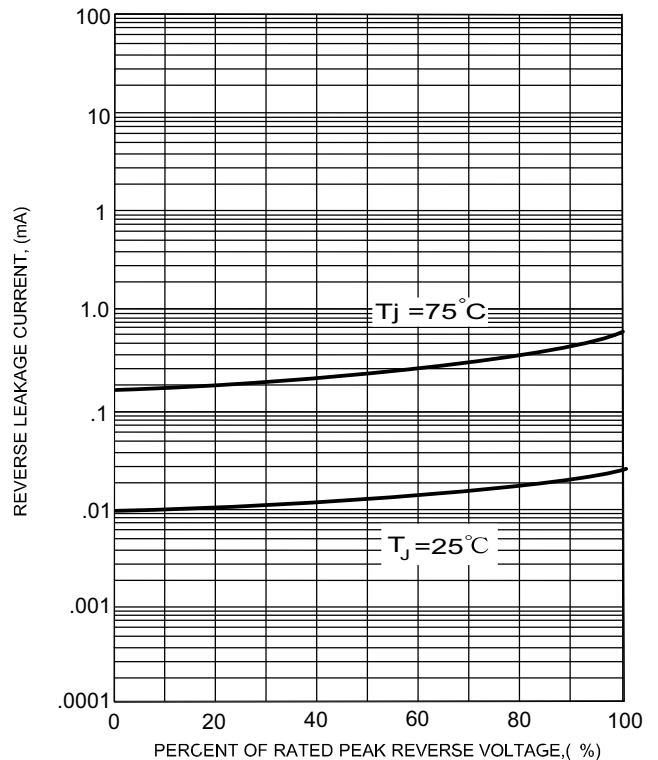


FIG.4- TYPICAL JUNCTION CAPACITANCE

