

Low VF Chip Schottky Barrier Diodes

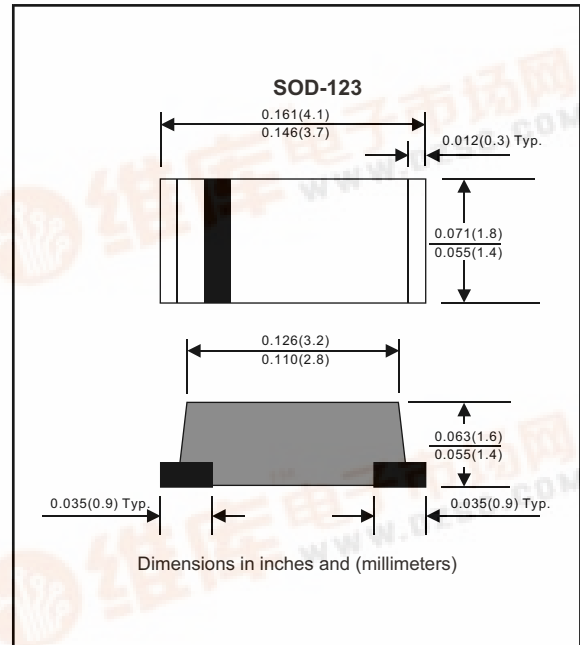
Formosa MS

SL13-M

Silicon epitaxial planer type

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound.
- For surface mounted applications.
- Exceeds environmental standards of ML-S-19500 / 228
- Low leakage current



Mechanical data

Case : Molded plastic, JEDEC SOD123 / MNISMA

Terminals : Solder plated, solderable per ML-STD-750, Method 2026

Polarity : Indicated by cathode band

Mounting Position : Any

Weight : 0.04 gram

MAXIMUM RATINGS (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current 50 Hz sine wave , R-load	On alumina substrate	I_0			1.29	A
	$T_L = 129^\circ\text{C}$ On glass-epoxy substrate				1.1	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			30	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^\circ\text{C}$	I_R			0.5	mA
	$V_R = V_{RRM}$ $T_A = 100^\circ\text{C}$				10	mA
Thermal resistance	Junction to ambient	R_{JA}		42		$^\circ\text{C} / \text{W}$
Diode junction capacitance	f=1MHz and applied 10VDC reverse voltage	C_J		90		pF
Storage temperature		T_{STG}	-55		+150	$^\circ\text{C}$

SYMBOLS	MARKING CODE	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature ($^\circ\text{C}$)
SL13-M	L3	30	21	30	0.40	-55 to +125

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage

RATING AND CHARACTERISTIC CURVES (SL13-M)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

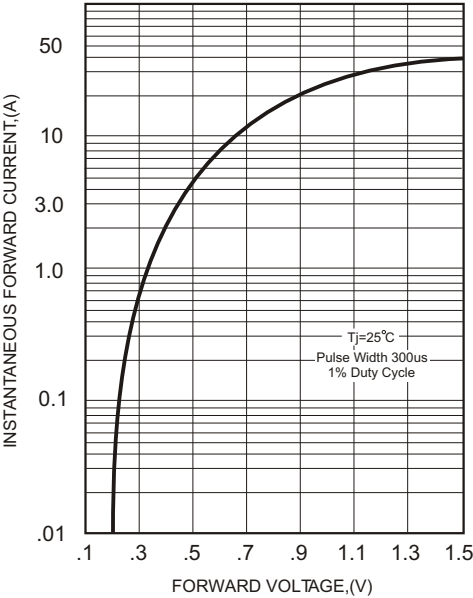


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

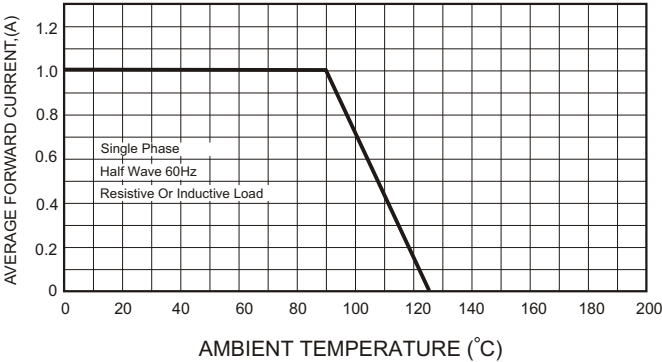


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

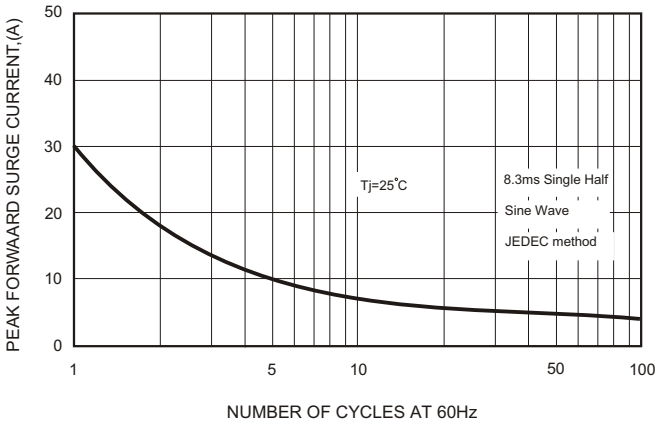


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

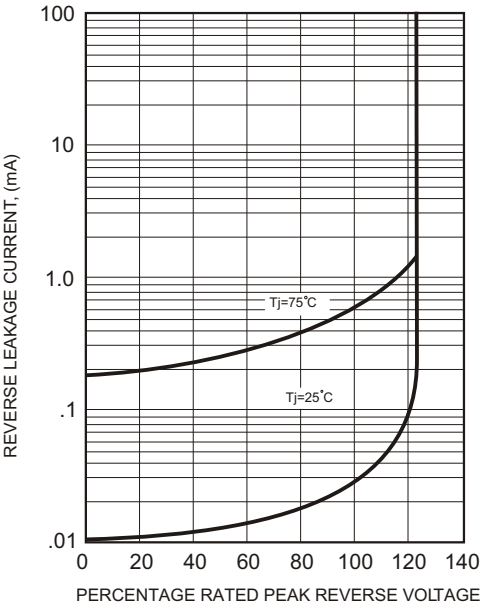


FIG.5-TYPICAL JUNCTION CAPACITANCE

