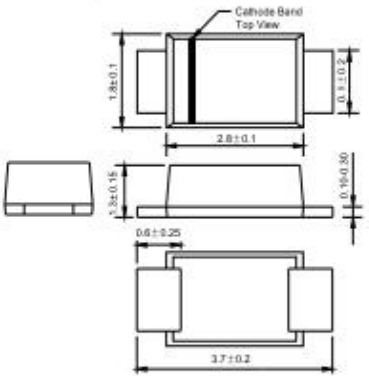
昌福半导体
CHANG FU SEMICONDUCTOR

K12 - K120

Features

- Metal to silicon rectifier, majority carrier conduction.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Low power loss, high efficiency.
- High current capability, low V_F
- High surge capacity.
- Glass passivated

SOD-123FL



Dimensions in millimeters

Schottky Rectifiers

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

CHARACTERISTICS	SYMBOL	K12	K13	K14	K15	K16	K18	K110	K115	K120	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	100	125	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current @T_L=100 ℃	$I_{(AV)}$	1.0									A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I_{FSM}	30									A
Maximum Forward Voltage at 1.0A DC	V_F	0.45	0.5	0.55	0.7		0.85		0.92	0.95	V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking Voltage @T_J=100℃	I_R	1.0 20									mA
Typical Junction Capacitance (Note1)	C_J	200									pF
Typical Thermal Resistance (Note2)	$R_{\theta JL}$	15									℃/W
Operating Temperature Range	T_J	-55 to +150									℃
Storage Temperature Range	T_{STG}	-55 to + 150									℃

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RATINGS AND CHARACTERISTIC CURVES (K12 THRU K120)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

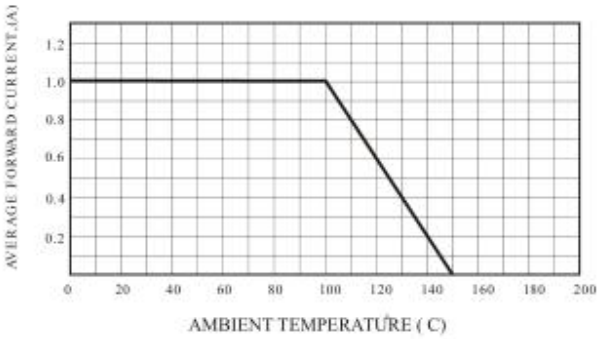

FIG.2-TYPICAL FORWARD CHARACTERISTICS

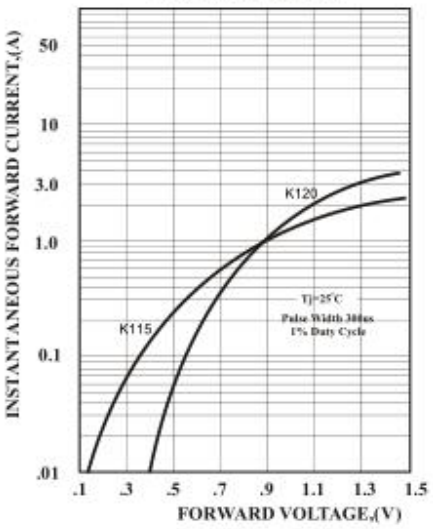

FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

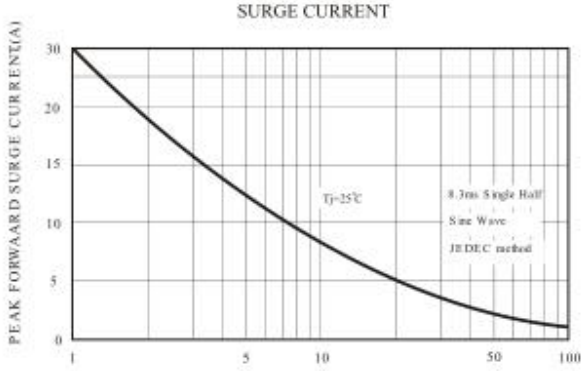

FIG.4-TYPICAL JUNCTION CAPACITANCE

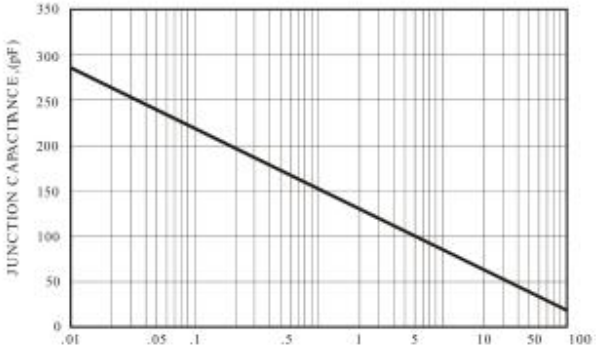

FIG.5 - TYPICAL REVERSE CHARACTERISTICS