

SAMYANG ELECTRONICS

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE RANGE: 20 --- 200 V

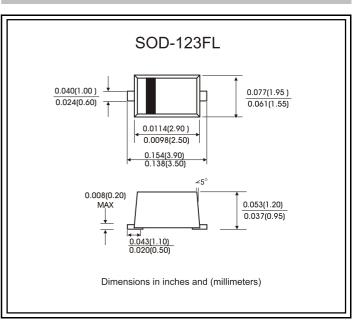
CURRENT: 2.0 A

FEATURES

- · Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- · Metal silicon junction ,majority carrier conduction
- · Guard ring for overvoltage protection
- · Low power loss ,high efficiency
- · High current capability ,Low forward voltage drop
- · High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:250 C/10 seconds at terminals, 0.375"(9.5mm)lead length,5lbs.(2.3kg)tension

MECHANICAL DATA

- · Case: SOD-123FL molded plastic body
- · Lead Finish: 100% Matte Sn (Tin)
- · Polarity: color band denotes cathode end
- · Mounting Position: Any
- · Weight: 11.7 mg(approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

	Symbols	K22	K23	K24	K25	K26	K28	K2A	K2B	K2D	Volts
Maximum repetitive peak reverse voltage	Vrrm	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	Vrms	14	21	28	35	42	57	71	105	140	Volts
Maximum DC blocking voltage	VDC	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current (See Fig. 1)	I(AV)	2.0									Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	50.0									Amps
Maximum instantaneous forward voltage at 2.0 A(note 1)	VF	0.55			C	0.75 0.8		.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) $T_A = 25^{\circ}\text{C}$	lr	0.2 10.0									mA
Typical thermal resistance (Note 2)	R, ja R, jl	88.0 28.0									°C/W
Operating junction temperature range	TJ	-65 to+150								℃	
Storage temperature range	Tstg	-65 to+150								°C	

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient.

FIG.1-FORWARD CURRENT DERATING CURVE

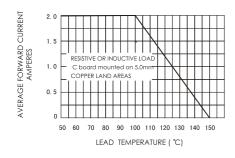


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

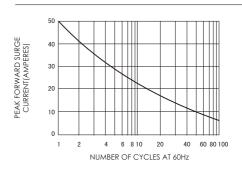


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

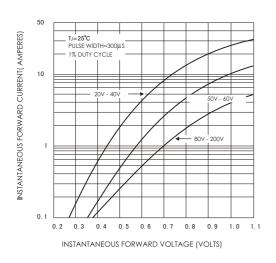
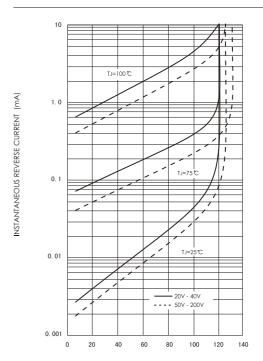


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE%

FIG.5-TYPICAL JUNCTION CAPACITANCE

