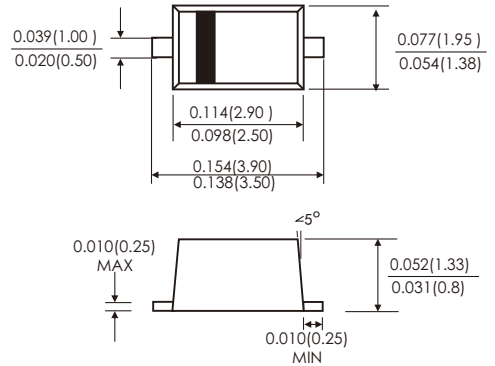


FEATURES

- 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



SOD-123FL



MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	K22	K23	K24	K26	K2A	K2B	K2D	Units	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	60	100	150	200	Volts	
Maximum RMS voltage	V_{RMS}	14	21	28	42	71	105	140	Volts	
Maximum DC blocking voltage	V_{DC}	20	30	40	60	100	150	200	Volts	
Maximum average forward rectified current	$I_{(AV)}$	2.0							Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50.0							Amps	
Maximum instantaneous forward voltage at 2.0 A(Note 1)	V_F	0.55		0.75		0.85	0.90	0.95	Volts	
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_A=25^{\circ}C$	100					20			μA
	$T_A=100^{\circ}C$	5.0					-			mA
	$T_A=125^{\circ}C$	-					3.0			
Typical thermal resistance(Note 2)	$R_{\theta JA}$	88.0							$^{\circ}C/W$	
	$R_{\theta JL}$	28.0								
Operating junction temperature range	T_J	-55 to +150							$^{\circ}C$	
Storage temperature range	T_{STG}	-55 to +150							$^{\circ}C$	

- Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle
 2. P.C.B. mounted with 0.2 X 0.2"(5.0 X 5.0mm)copper pad areas

RATINGS AND CHARACTERISTIC CURVES K22 THRU K2D

FIG.1-FORWARD CURRENT DERATING CURVE

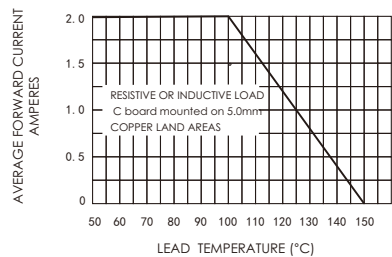


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

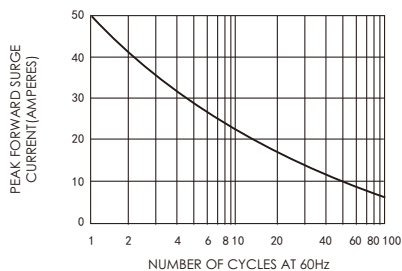


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

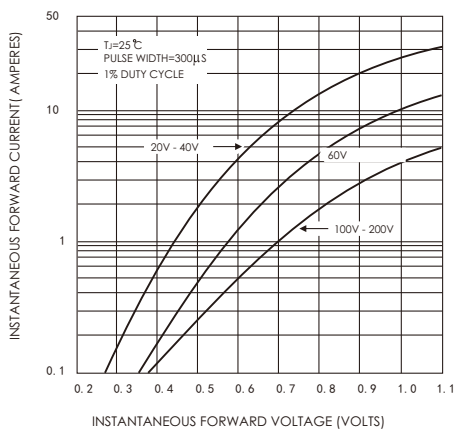


FIG.4-TYPICAL REVERSE CHARACTERISTICS

