AS1F20T-200T

1.0Amp Surface Mount Schottky Barrier Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

SOD123FL

Mechanical Data

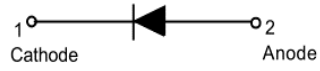
Case: JEDEC SOD123FL molded plastic body

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

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight : 0.0007 ounce, 0.02 grams



Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	20T	40T	60T	80T	100T	150T	200T	UNITS
	Mark Code	K12	K14	K16	K18	K110	K115	K120	
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	150	200	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	28	56	70	105	150	VOLTS
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	150	200	VOLTS
Maximum average forward rectified current at T_L=110°C	$I_{(AV)}$	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	V_F	0.55		0.70	0.85		0.95		Volts
Maximum DC reverse current T_A=25℃	I_R	0.5					0.1		mA
at rated DC blocking voltage T_A=100℃		20.0			10.0		2.0		
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	88.0							C/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150							°C

Note: 1.P.C.B. mounted with 5.0x5.0mm copper pad areas

Ratings And Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

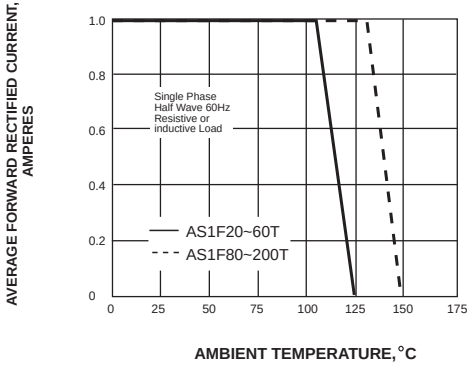


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

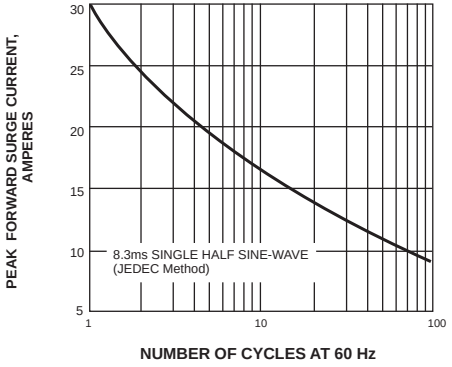


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

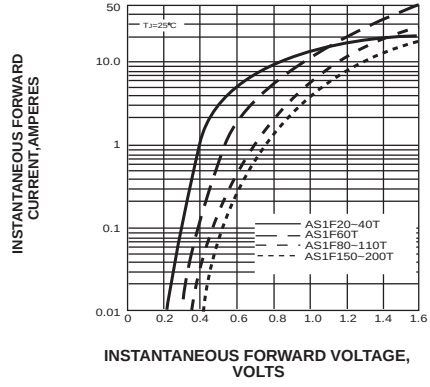


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

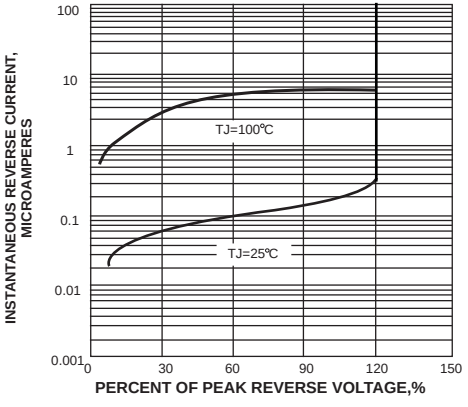
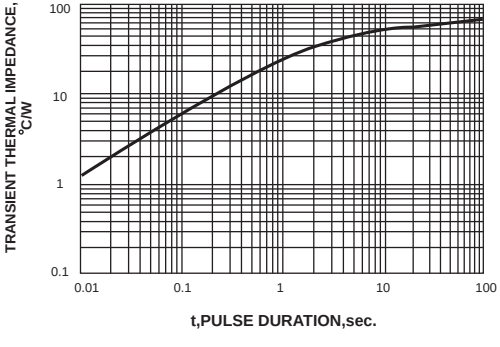
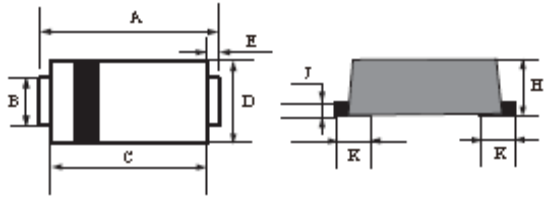


FIG. 5-TYPICAL TRANSIENT THERMAL IMPEDANCE



SOD123FL



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	3.5	3.9	0.138	0.159
B	0.75	1.00	0.029	0.040
C	2.5	3.0	0.098	0.119
D	1.6	2.0	0.063	0.079
E	0.45Typ		0.018Typ	
H	0.8	1.2	0.032	0.047
J	0.12	0.22	0.005	0.009
K	0.5-0.8		0.020-0.031	

Dimensions in inches and (millimeters)

Pad Layout **Unit: inch(mm)**