SEMICONDUCTOR

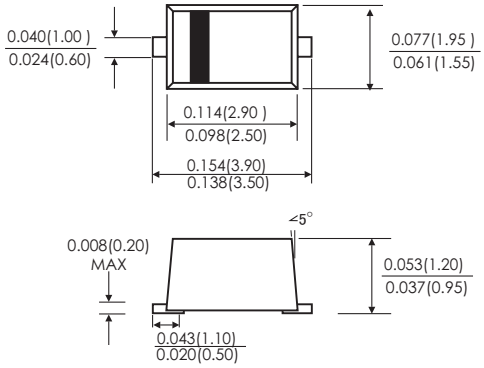
BARRIER RECTIFIER
Reverse Voltage - 25 Volts
Forward Current -2.0Ampere

FEATURES

- Small power mold type(PMDU)
- High reliability
- Ultra low V_F



SOD-123FL



Dimensions in inches and (millimeters)

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	B23			Unit
Maximum repetitive peak reverse voltage	V_{RRM}	25			Volts
Maximum RMS voltage	V_{RMS}	18			Volts
Maximum DC blocking voltage	V_{DC}	25			Volts
Maximum average forward rectified current (See Fig. 1)	$I_{(AV)}$	1. 0			Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30			Amps
Operating junction temperature range	T_J	-40 to+125			°C
Storage temperature range	T_{STG}	-40 to+125			°C
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JL}$	206 118			°C/W
	Symbols	Test condition	TYP.	MAX.	Unit
Forward voltage	V_F	IF=0. 5A	0. 28	0. 32	Volts
		IF=1A	0. 31	0. 35	
		IF=2A	0. 36	0. 41	
Leakage current	I_R	VR=25V, TA=25℃	180	600	μA

RATINGS AND CHARACTERISTIC CURVES B23

FIG.1-FORWARD CURRENT DERATING CURVE

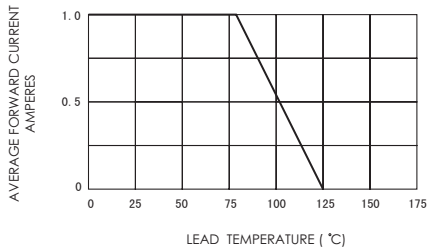


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

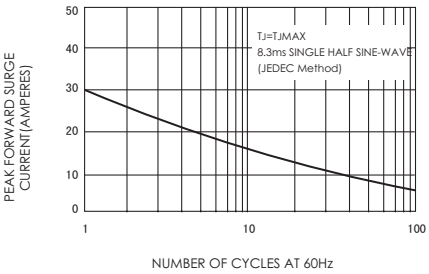


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

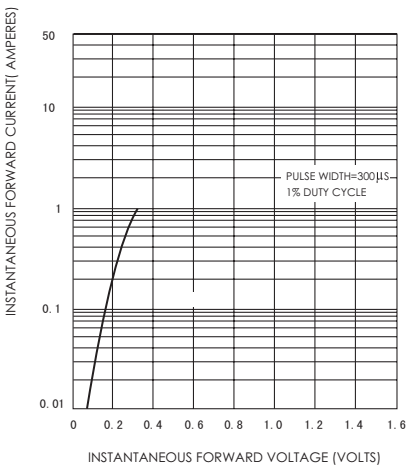


FIG.4-TYPICAL REVERSE CHARACTERISTICS

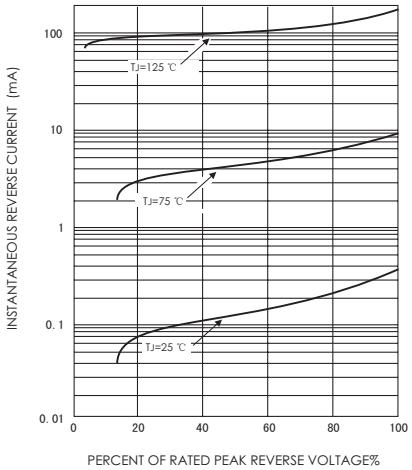


FIG.5-TYPICAL JUNCTION CAPACITANCE

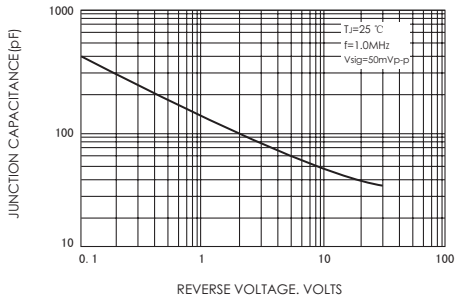


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

