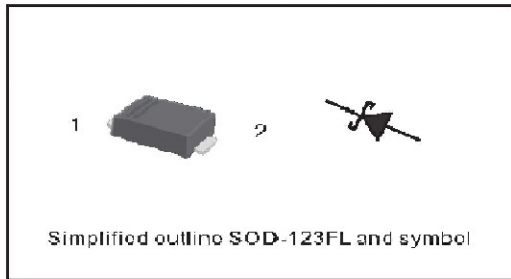


SCHOTTKY DIODE

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



FEATURES

- ◆ For use in low voltage, high frequency inverters
- ◆ Free wheeling, and polarity protection applications

MECHANICAL DATA

Case: Molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on case
Marking: 72.

Maximum ratings and electrical characteristics, Single diode @ $T_A=25^\circ\text{C}$

PARAMETER	SYMBOLS	TECHNICAL DATA	UNITS
Peak repetitive peak reverse voltage	V_{RRM}	20	V
Working peak reverse voltage	V_{RWM}		
DC Blocking voltage	V_R		
RMS Reverse voltage	$V_{R(RMS)}$	14	V
Average rectified output current	I_o	1	A
Peak forward surge current @=8.3ms	I_{FSM}	9	A
Repetitive peak forward current	I_{FRM}	1.5	A
Power dissipation	P_d	250	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500	K/W
Storage temperature	T_{STG}	-40 to +125	$^\circ\text{C}$
Non-Repetitive peak reverse voltage	V_{RM}	20	V

Electrical ratings @ $T_A=25^\circ\text{C}$

PARAMETER	SYMBOLS	Min.	Max.	Unit	Test conditions
Reverse breakdown voltage	$V_{(BR)}$	20		V	$I_R=1\text{mA}$
Reverse voltage leakage current	I_R		1	mA	$V_R=20\text{V}$
Forward voltage	V_F		0.45	v	$I_F=1\text{A}$
Diode capacitance	C_D		120	pF	$V_R=4\text{V}, f=1.0\text{MHz}$

FIG. 1- FORWARD CURRENT DERATING CURVE

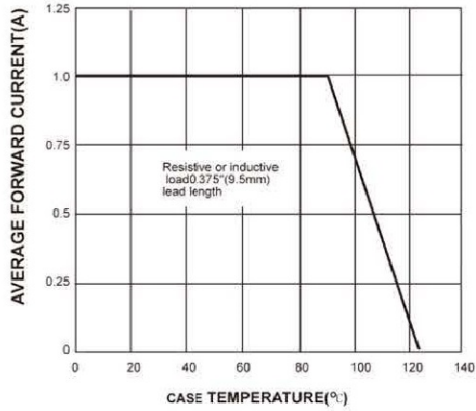


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

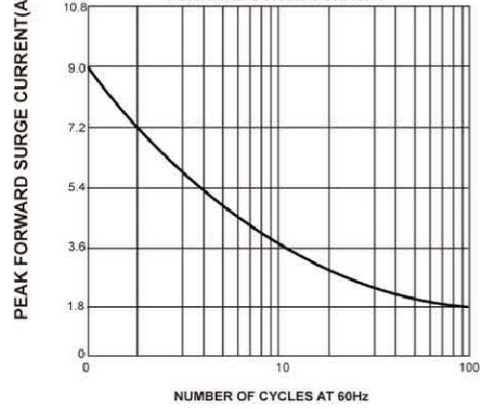


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

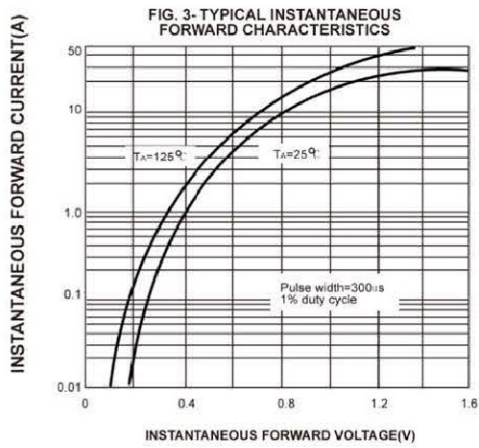


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

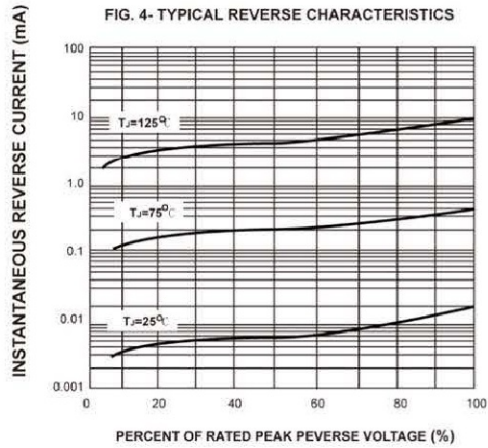


FIG. 5- TYPICAL JUNCTION CAPACITANCE

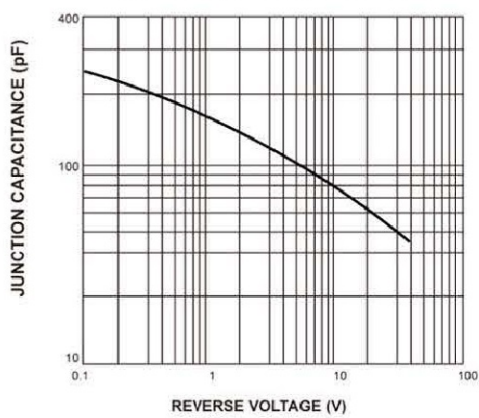
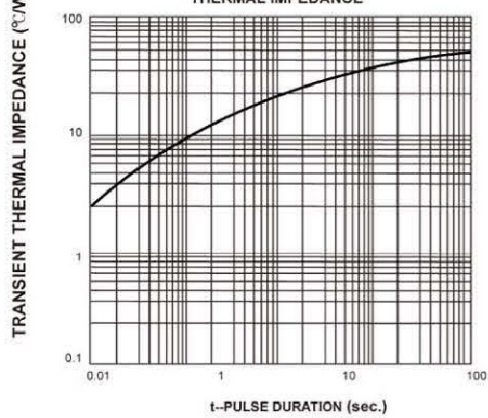


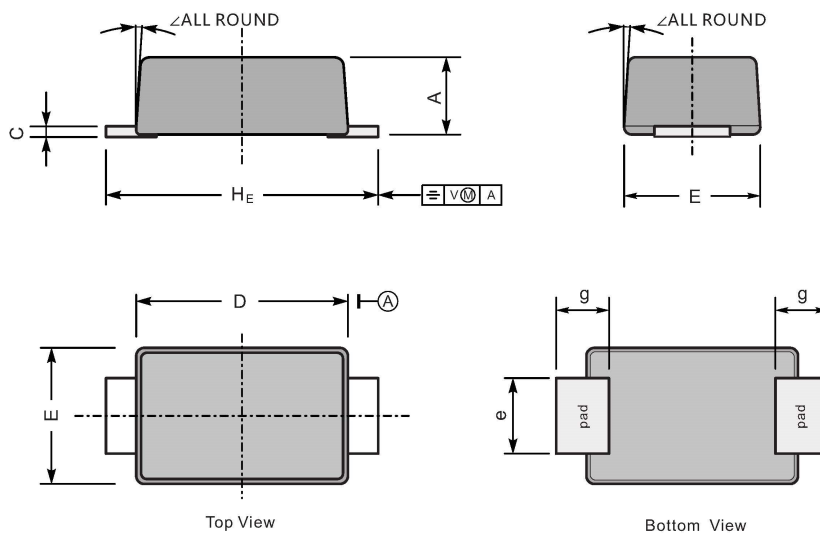
FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



PACKAGE OUTLINE

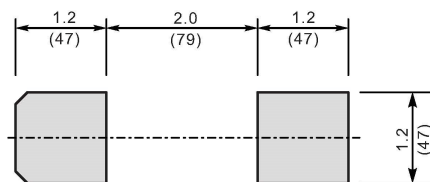
Plastic surface mounted package; 2 leads

SOD123FL



UNIT		A	C	D	E	e	g	H _E	\angle
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

The recommended mounting pad size



Unit: $\frac{\text{mm}}{\text{(mil)}}$