

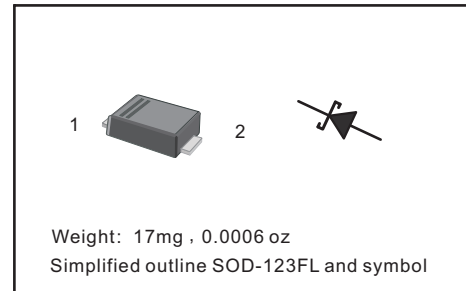
Trench MOS Barrier Schottky

Features

- Low power loss, high efficiency
- High current capability
- low forward voltage drop
- For use in low voltage

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



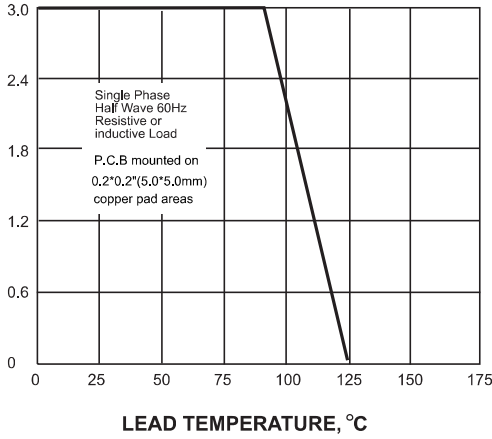
Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	Spec. Limit			Unit
		Min.	Typ.	Max.	
Max. Repetitive Peak Reverse Voltage @0.5mA	V_{RRM}	45	50		V
Max. Average Forward Rectified Current	$I_{F(AV)}$			3	A
Forward Voltage Drop	V_F		0.340 0.380 0.410	0.430	V
$I_F=1A$ $I_F=2A$ $I_F=3A$					
Max. Reverse Current at V_{RRM} @45V	I_R		80	200	μA
Operating Temperature Range	T_J	-55		+125	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55		+150	$^{\circ}C$

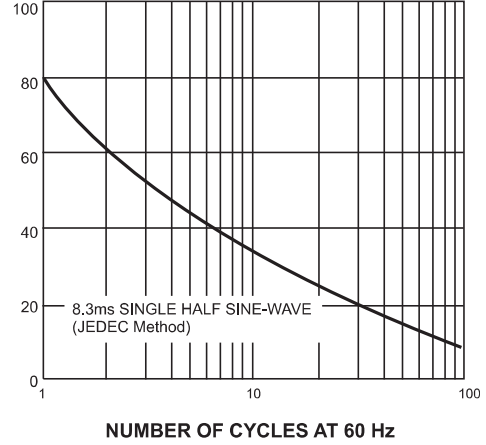
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



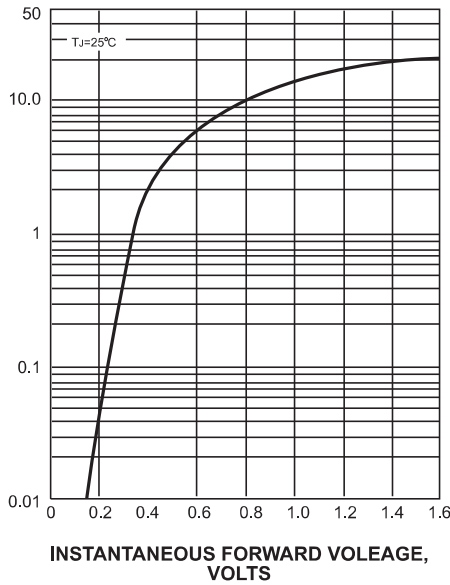
PEAK FORWARD SURGE CURRENT,
AMPERES

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



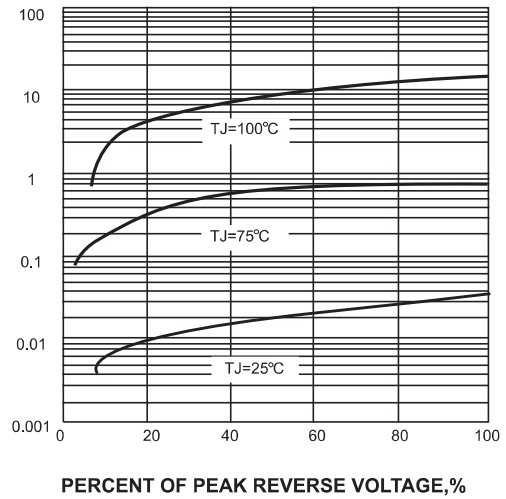
INSTANTANEOUS FORWARD CURRENT,AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



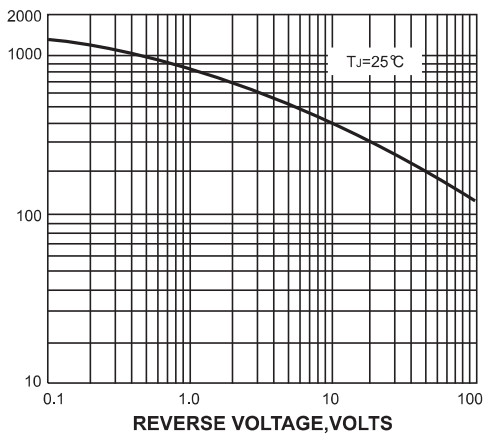
INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



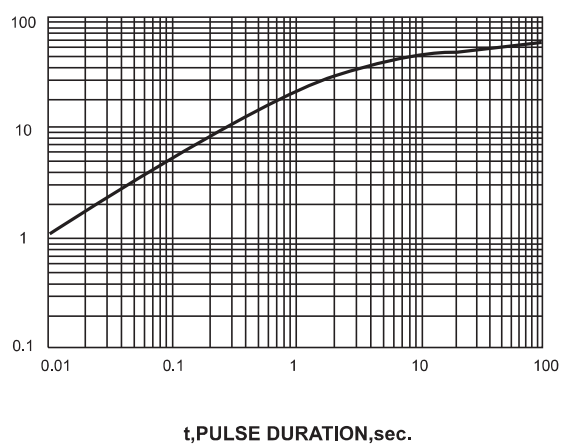
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

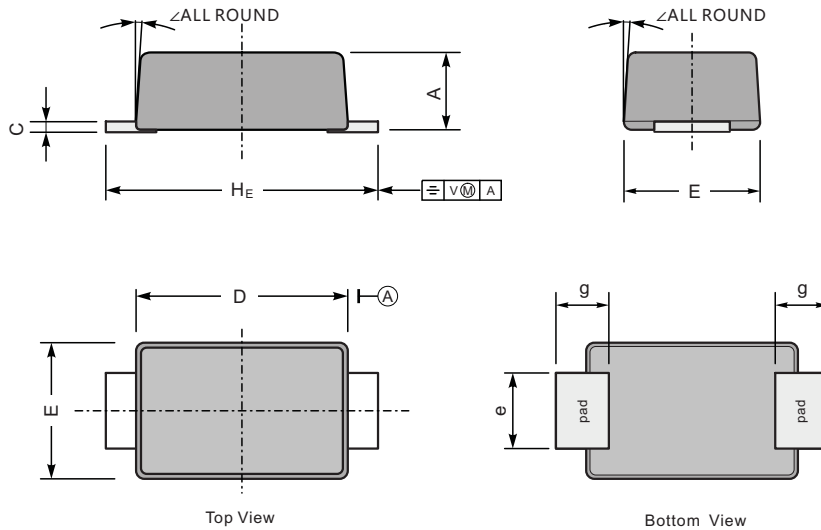
FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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

