

Features

- Multilayer Metal -Silicon Potential Structure
- High Current Capability, High Efficiency
- High Junction Temperature Capability
- Low Leakage Current
- Low forward voltage drop

Applications

- Surface mount schottky barrier rectifier
- Buck and Boost dc-dc Converters
- Low Voltage High Frequency Switching Power Supply
- Low Voltage High Frequency Invers Circuit
- Low Voltage Continued Circuit and Protection Circuit



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Reverse Voltage	VR, VRM, VRWM	40	V
Maximum RMS voltage	VRMS	28	V
Forward Continuous Current	IFM	3	A
Non-Repetitive Peak Forward Surge Current@t=8.3ms	IFSM	80	A
Maximum instantaneous forward voltage at 3.0A	VF	0.37	V
Typical Thermal Resistance per leg @TA = 25°C	RθJA	75	°C/W
Operating Junction Temperature Range	TJ	125	°C
Storage Temperature Range	TSTG	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	IF=30uA	40	--	--	V
Reverse current	IR	VR=40V	--	--	30	uA
Forward voltage	VF	IF=3A	--	0.37	0.42	V
Total Capacitance	C _{tot}	VR = 0 V, f = 1 MHz	--	450	--	pF

Typical Electrical Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

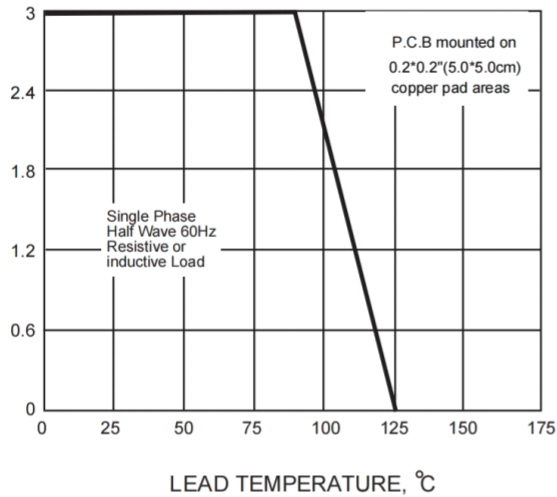


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

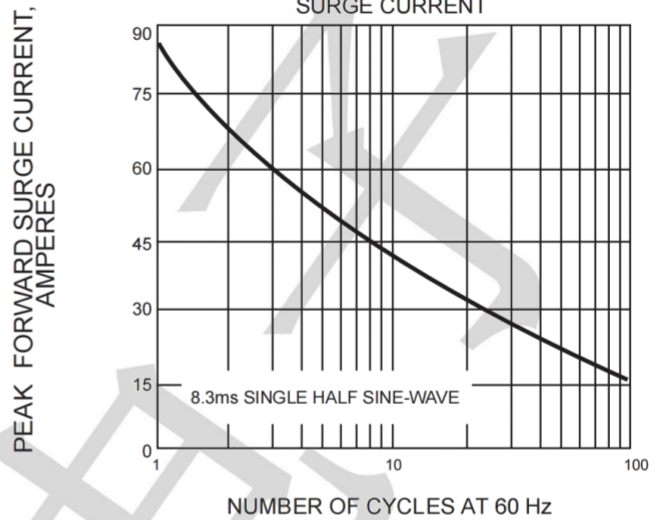


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

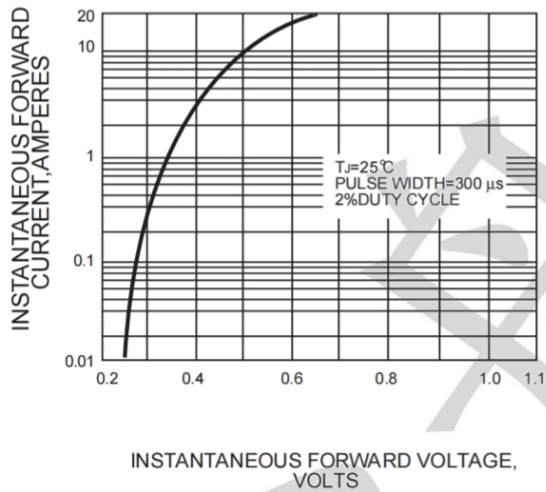


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

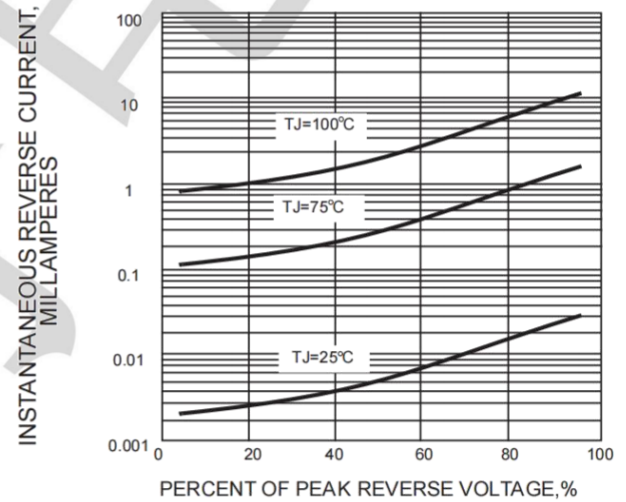


FIG. 5-TYPICAL JUNCTION CAPACITANCE

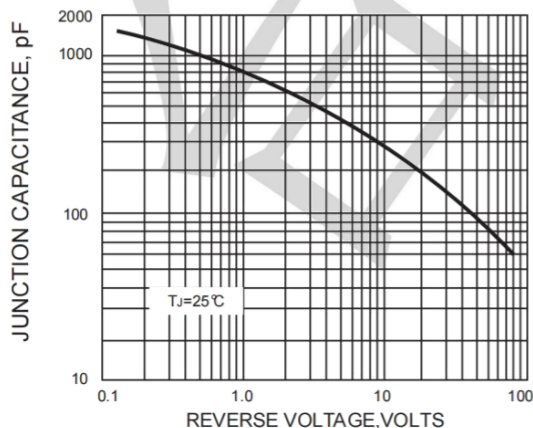
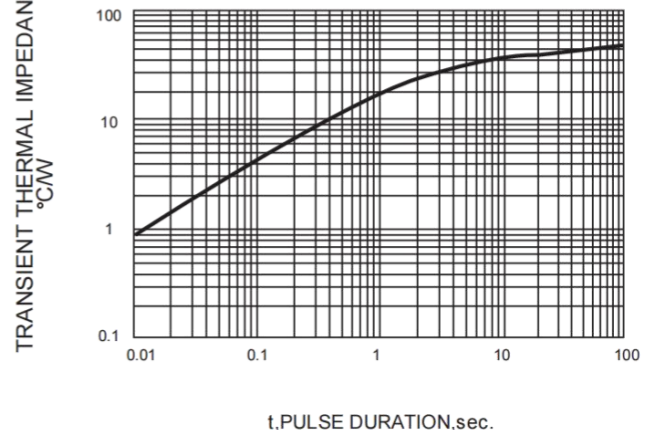
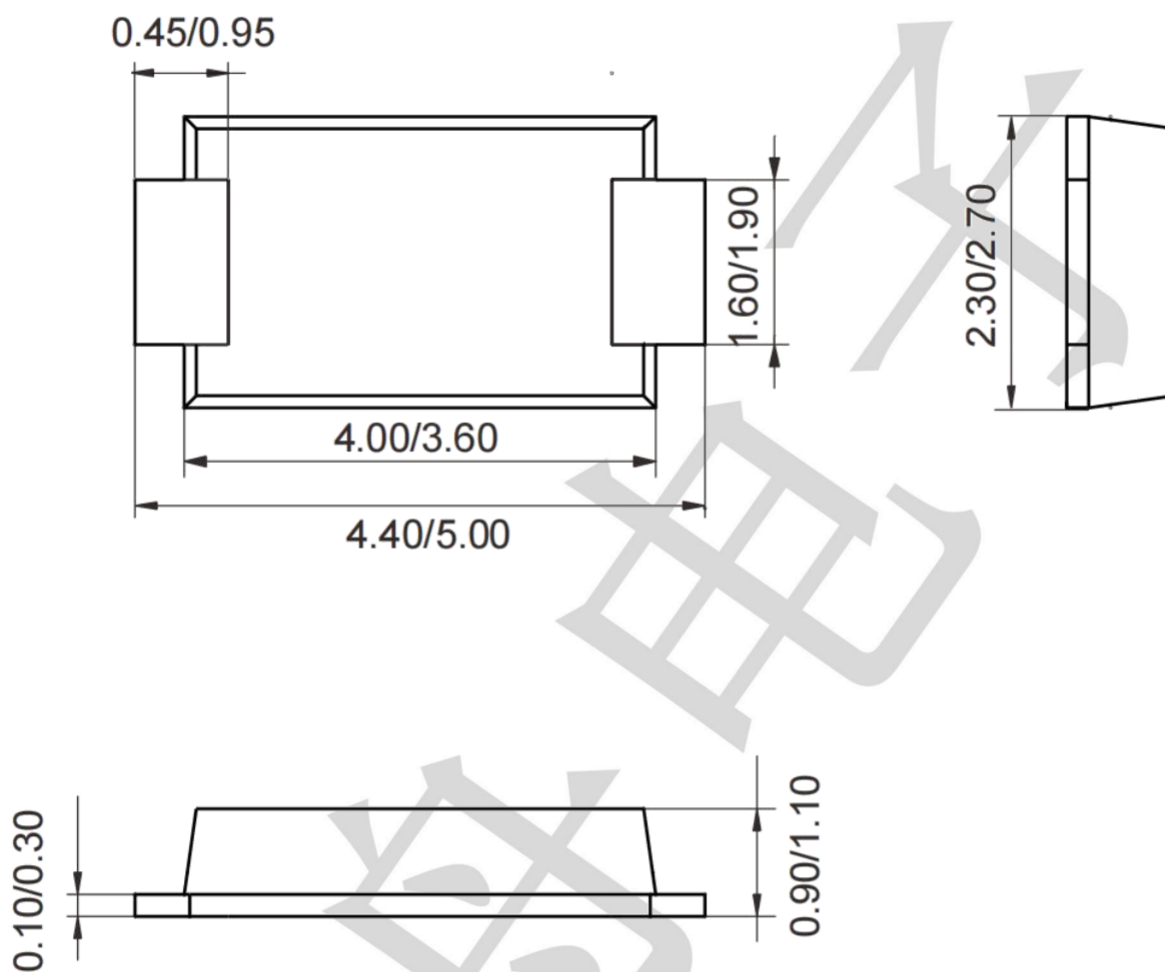


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Package Outline Dimensions (unit: mm)

SOD128



Mounting Pad Layout (unit: mm)

