

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 40 Volts CURRENT 1.0 Ampere

FEATURES

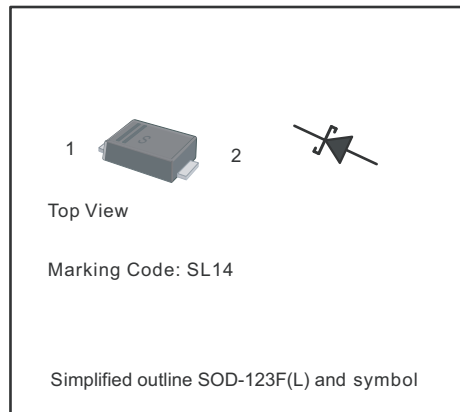
- * Metal silicon junction, majority carrier conduction
- * For surface mounted applications
- * Low power loss, high efficiency
- * High forward surge current capability
- * High surge capability
- * High reliability
- * P/N suffix V means AEC-Q 101 qualified, e.g:DSL14WV
- * P/N suffix V means Halogen-free

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-0
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Resistive or inductive load.

MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	DSL14WV	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	Volts
Maximum RMS Voltage	V _{RMS}	28	Volts
Maximum DC Blocking Voltage	V _{DC}	40	Volts
Maximum Average Forward Rectified Current	I _O	1.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30	Amps
Typical Current Square Time	I ² T	3.73	A ² S
Operating Temperature Range	T _J	-55 to + 150	°C
Storage Temperature Range	T _{STG}	-55 to + 150	°C

ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	DSL14WV	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC	V _F	.36	Volts
Maximum Average Reverse Current	I _R	0.5	mA
at Rated DC Blocking Voltage		32	mA

NOTES : 1. Thermal Resistance : Mounted on PCB.

2020-11/08
REV:O

RATING AND CHARACTERISTICS CURVES (DSL14WV)

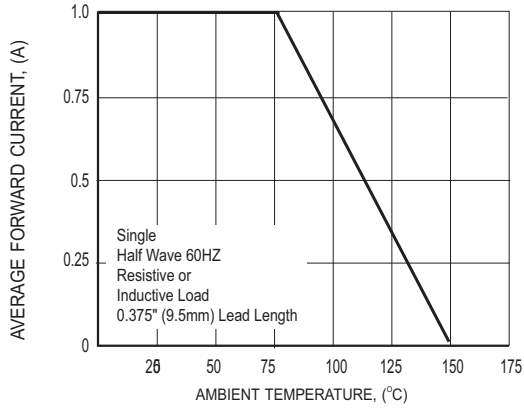


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

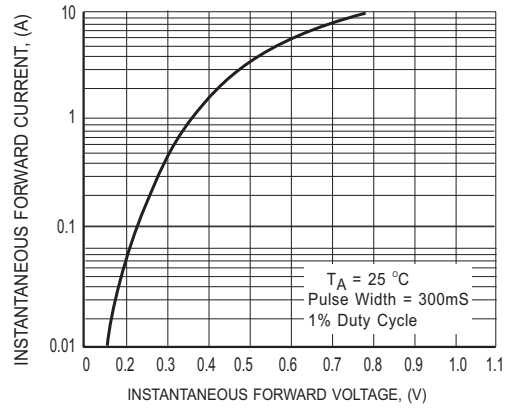


FIG.2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

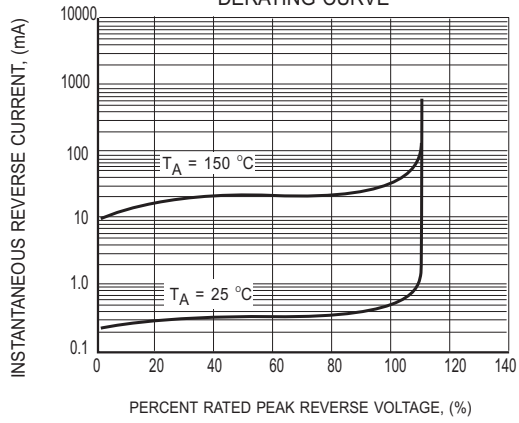


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

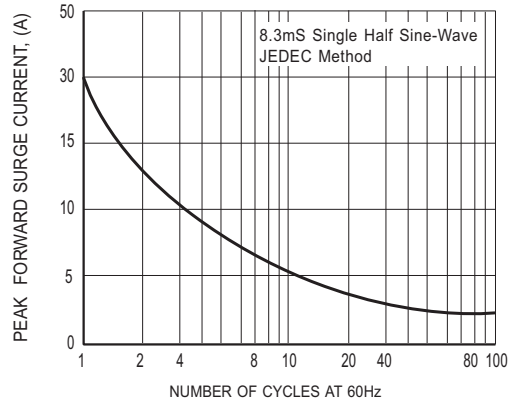
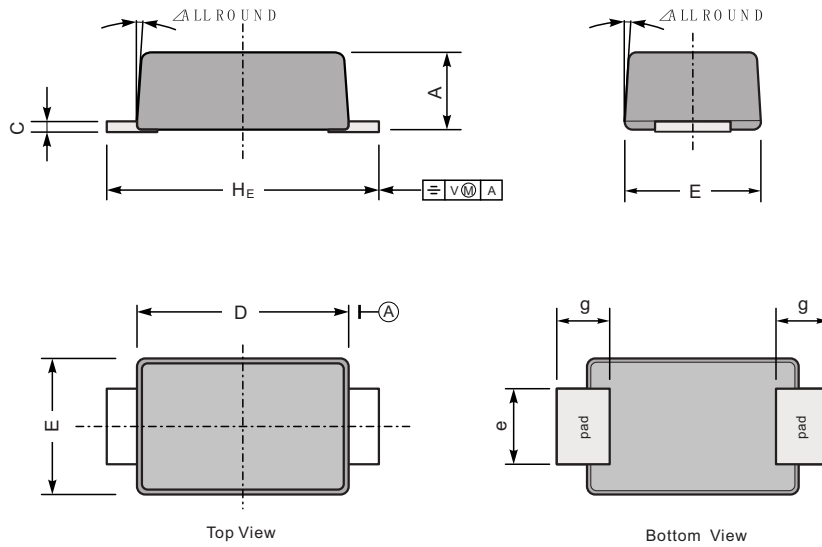


FIG.4 TYPICAL REVERSE CHARACTERISTICS

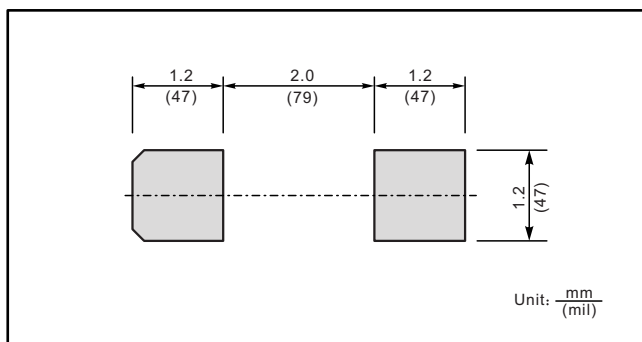
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

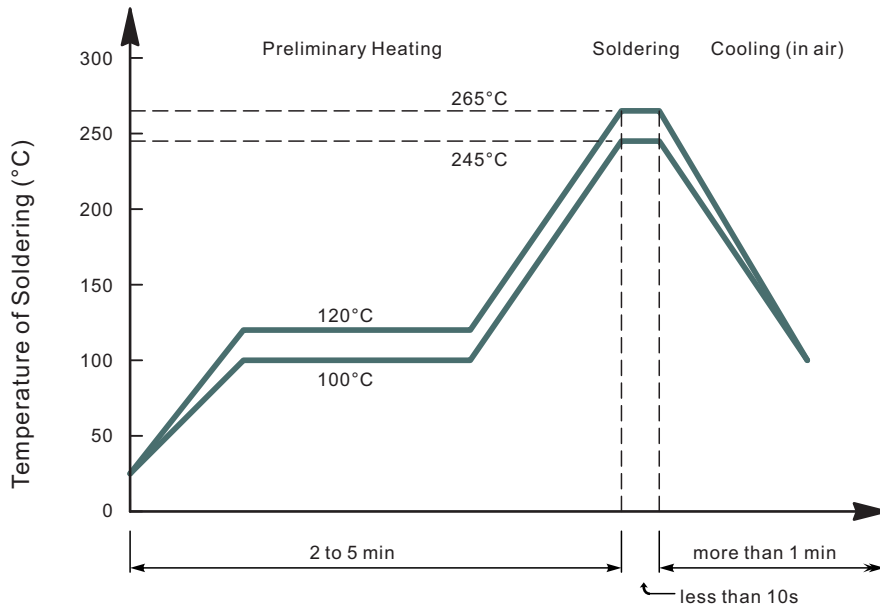


UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

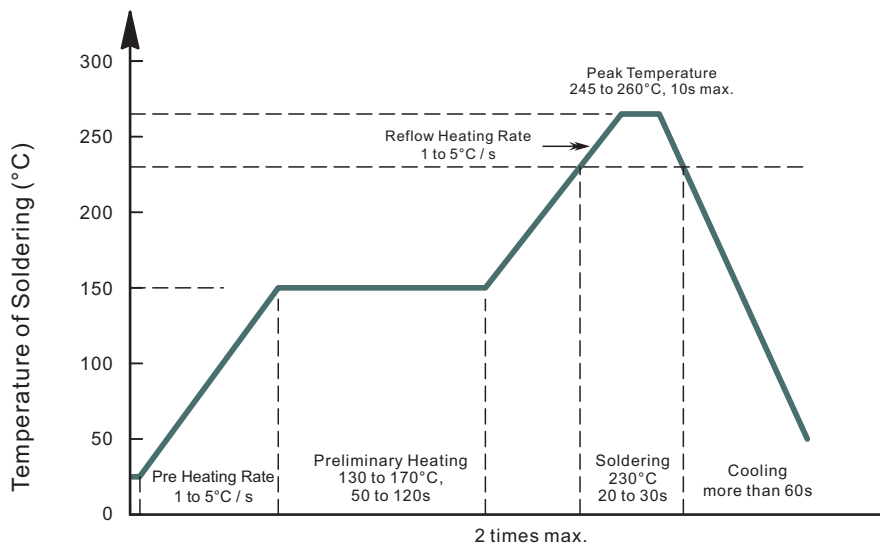
The recommended mounting pad size



• Recommended condition of flow soldering



• Recommended condition of reflow soldering



Recommended peak temperature is over 245 °C. If peak temperature is below 245 °C, you may adjust the following parameters; time length of peak temperature (longer), time length of soldering (longer), thickness of solder paste (thicker)

• Condition of hand soldering

Temperature: 350°C
 Time: 3s max.
 Times: one time

• Remark:

Lead free solder paste (96.5Sn/3.0Ag/0.5Cu)

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOD-123F(L)	-W/T	3,000	15,000	---	---	178	390*205*310	120,000	6.964

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