

DSS12U THRU DSS125U
SINGLE PHASE 1.0AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

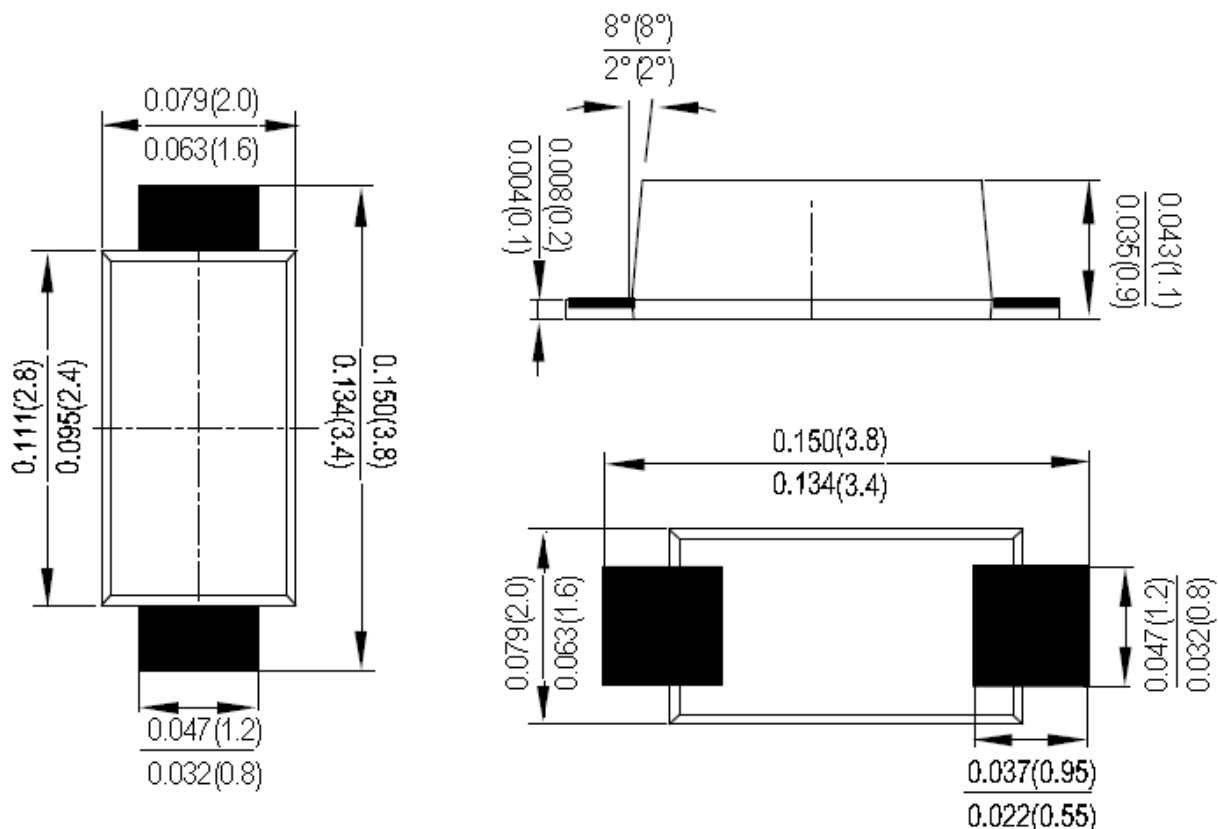
Features:

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High temperature soldering guaranteed: 260/10°C seconds, 0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data:

- Case: Case: SOD-123FL, molded plastic
- Terminals: plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

Mechanical Dimensions: In Inches/mm



SOD-123FL

Marking Diagram:



D12U = Code

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
DSS12U THRU DSS125U	SOD-123FL (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	DSS 12U	DSS 13U	DSS 14U	DSS 15U	DSS 16U	DSS 18U	DSS 110U	DSS 115U	DSS 120U	DSS 125U	Units	
	Code	D12U	D13U	D14U	D15U	D16U	D18U	D110U	D115U	D120U	D125U		
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	250	V	
Working Peak Reverse Voltage	V_{RWM}	20	30	40	50	60	80	100	150	200	250	V	
DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	250	V	
RMS Reverse Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	175	V	
Average Rectified Output Current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	1.0										A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on Rated load(JEDEC Method)	I_{FSM}	40										A	
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	6.640										A^2s	
Forward Voltage per element @ $I_F=1.0\text{A}$	V_F	0.50			0.67		0.80		0.90		0.92	V	
Peak Reverse Current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	0.1					0.05					mA	
		10					5						
Typical Junction Capacitance (Note 1)	C_J	110				80							pF
Junction Temperature	T_J	-55 to +150											$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150											$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

FIG. 1- FORWARD CURRENT DERATING CURVE

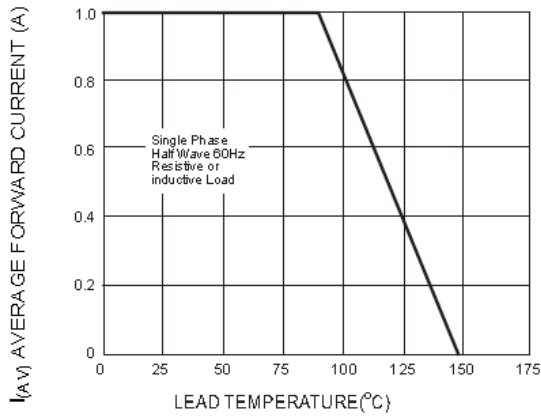


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

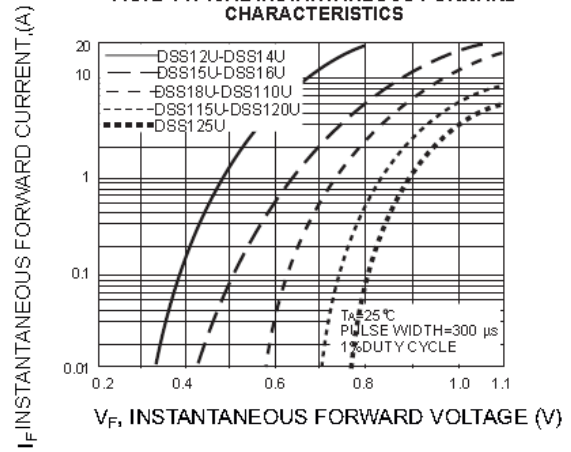


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

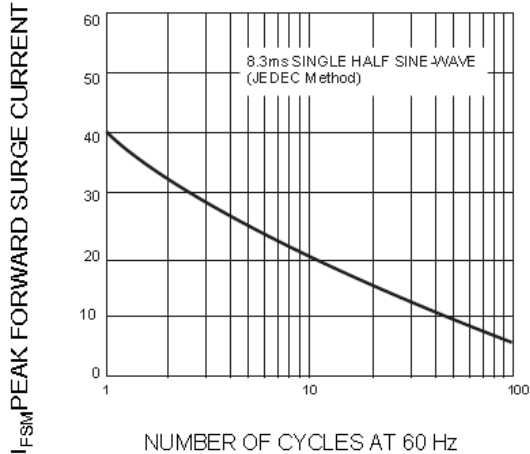


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

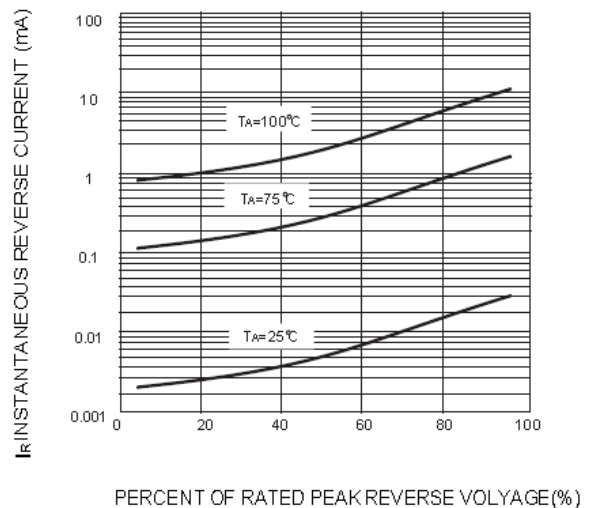
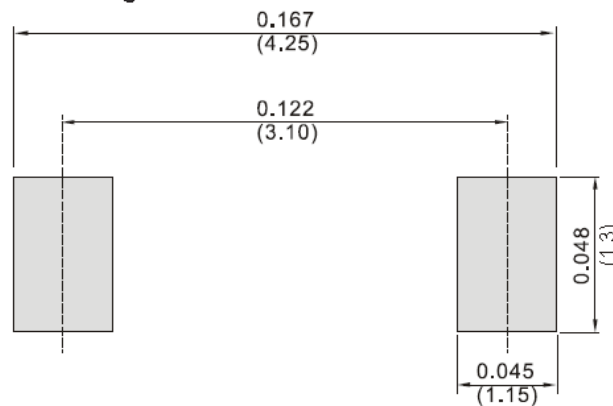


Fig.5 TYPICAL CAPACITANCE





DSS12U THRU DSS125U

Technical Data
Data Sheet N1873, Rev. -

Green Products

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