Technical Data
Data Sheet N2420, Rev. -

RoHS HF

DSS22U THRU DSS220U

SINGLE PHASE 2.0AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SOD-123FL

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
- This is a Halogen Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram

Mechanical Data

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

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	DSS 22U	DSS 23U	DSS 24U	DSS 25U	DSS 26U	DSS 28U	DSS 210U	DSS 215U	DSS 220U	Units
	Marking Code	D22U	D23U	D24U	D25U	D26U	D28U	D210U	D215U	D220U	
Peak Repetitive Reverse Voltage DC Blocking Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
	V_{DC}	20	30	40	50	60	80	100	150	200	V
RMS Reverse Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Average Rectified Output Current at T_L=90℃	$I_{F(AV)}$	2.0									A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on Rated load(JEDEC Method)	I_{FSM}	60									A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	14.94									A^2s
Forward Voltage per element @I_F=2.0A	V_F	0.50			0.67		0.80		0.90		V
Peak Reverse Current T_A=25 ℃	I_R	0.1					0.05				mA
at rated DC blocking voltage T_A=100 ℃		10					5				
Typical Junction Capacitance (Note 1)	C_J	100					50				pF
Typical Thermal Resistance Junction to Ambient (Note 2)	$R_{\theta JA}$	75									°C/W
Junction and Storage Temperature Range	T_J	-55 to +150									°C
Junction and Storage Temperature Range	T_{STG}	-55 to +150									°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4V D.C
2. PCB mounted on 0.2 X 0.2" (5.0 X 5.0 mm) copper pad areas.

Ratings and Characteristics Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

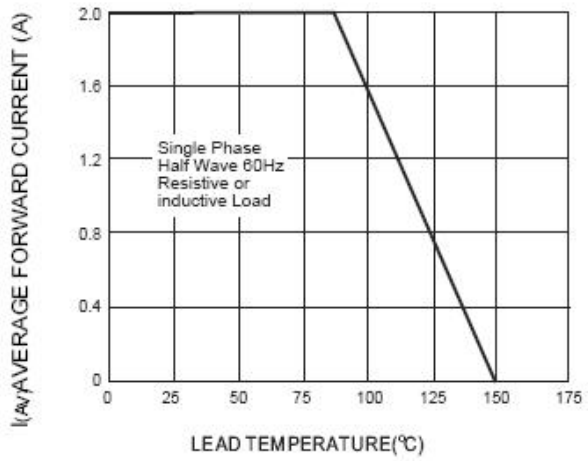


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

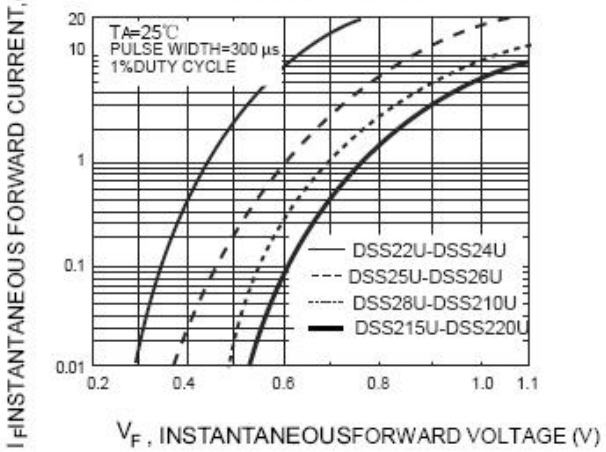


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

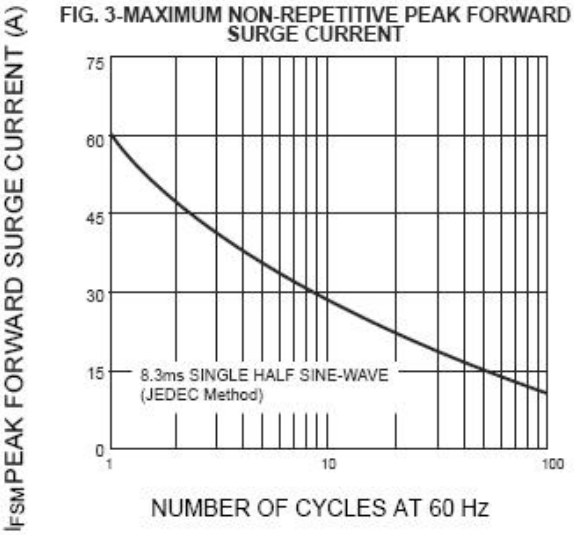
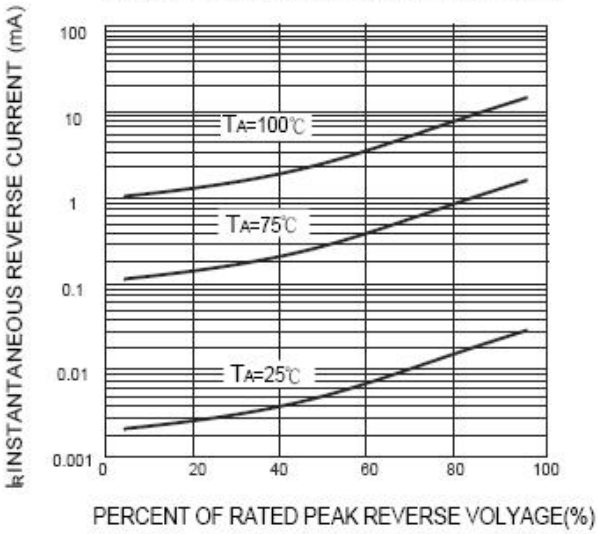


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



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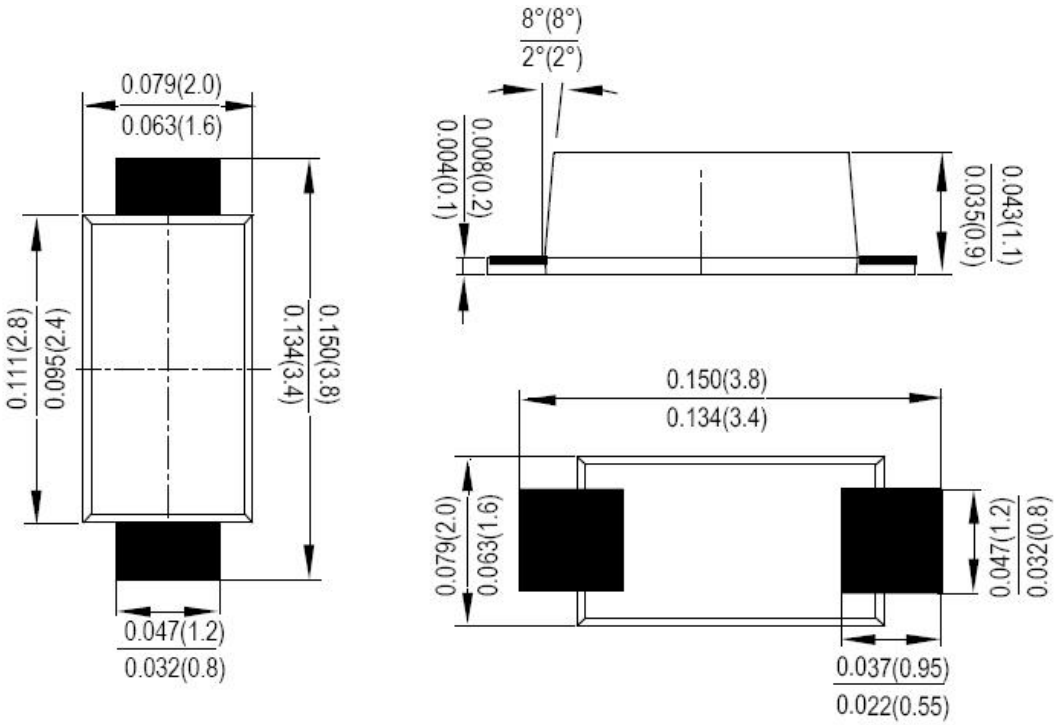
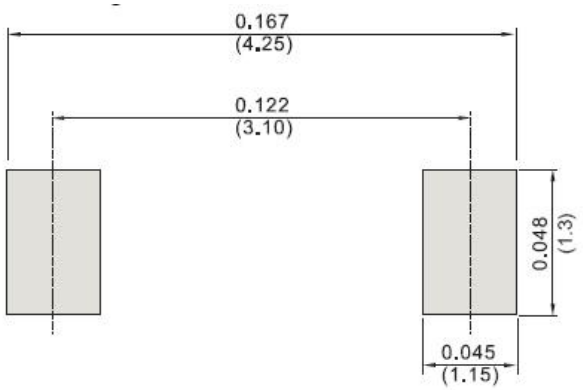
Mechanical Dimensions SOD-123FL(Millimeters)



Recommended Soldering Pattern (mm)

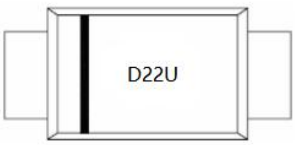


Ordering Information

Device	Package	Shipping
DSS22U THRU DSS220U	SOD-123FL	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



D22U = Marking Code

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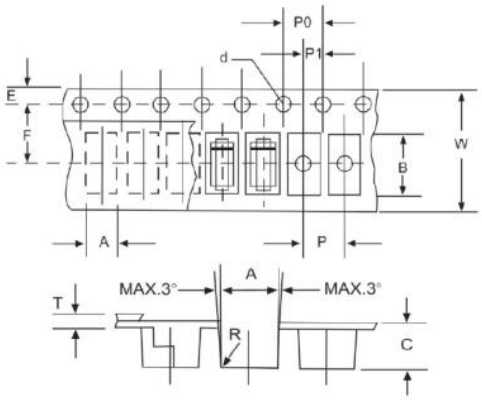
Carrier Tape Specification SOD-123FL



SYMBOL	Millimeters	
	Min.	Max.
A	1.95	2.15
B	3.85	4.05
C	1.35	1.55
d	1.50	1.60
E	1.65	1.85
F	3.40	3.60
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

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