

# New Jersey Semi-Conductor Products, Inc.

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## RECTIFIERS

### High Efficiency, 2.5A

UES1101 BYV27-50  
UES1102 BYV27-100  
UES1103 BYV27-150

#### FEATURES

- Very Fast Recovery Times
- Very Low Forward Voltage
- Small Size
- Convenient Package

#### DESCRIPTION

An axial leaded power rectifier useful in many switching applications. Particularly suited where very fast recovery and low forward voltage are required.

#### ABSOLUTE MAXIMUM RATINGS

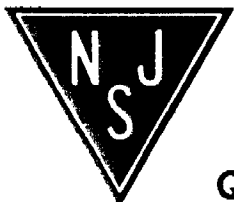
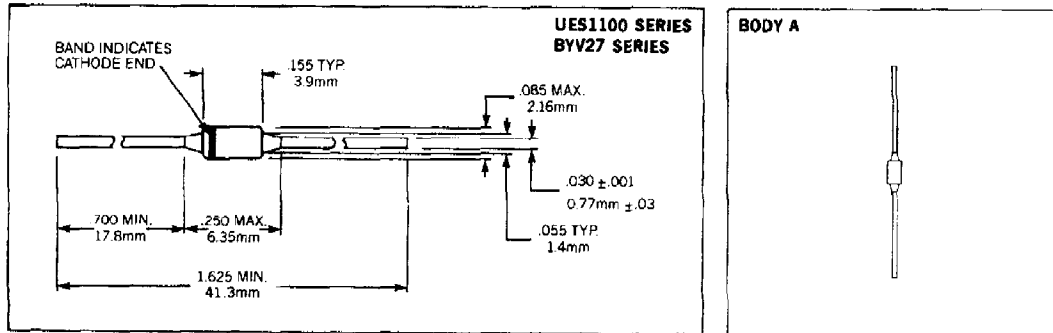
	UES1101	UES1102	UES1103	BYV27-50	BYV27-100	BYV27-150
Peak Inverse Voltage, $V_R$	50V	100V	150V	50V	100V	150V
Maximum Average D.C. Output at $T_J = 75^\circ\text{C}$ , $L = \frac{3}{8}"$ , $I_o$	2.5A	2.5A	2.5A	2.5A	2.0A	2.0A
Non-Repetitive Surge Current at 8.3ms, $I_{FSM}$	35A	35A	35A	35A	50A	50A
Thermal Resistance at $L = \frac{3}{8}"$ , $R_{\theta JC}$	38°C/W	38°C/W	38°C/W	38°C/W	46°C/W	46°C/W
Junction Operating Temperature, $T_J$	175°C	175°C	175°C	175°C	165°C	165°C
Operating and Storage Temperature Range	-55°C to +175°C					

#### ELECTRICAL SPECIFICATIONS

Type	Maximum Reverse Voltage $V_R$	Maximum Forward Voltage @		Maximum Reverse Current @ Rated $V_R$		Maximum Reverse Recovery Time*
		$T_J = 25^\circ\text{C}$	$T_J = 100^\circ\text{C}$	$T_J = 25^\circ\text{C}$	$T_J = 100^\circ\text{C}$	
UES1101	50V	.975V	.895V	2 $\mu\text{A}$	50 $\mu\text{A}$	25nS
UES1102	100V	@	@			
UES1103	150V	2A	2A			
BYV27-50	50V	1.25V	.85V	1 $\mu\text{A}$	150 $\mu\text{A}$	25nS
BYV27-100	100V	@	@			
BYV27-150	150V	5A	2.5A			

\*Measured in circuit  $I_R = \frac{1}{2}A$ ,  $I_F = 1.0A$ ,  $I_{REC} = \frac{1}{2}A$

#### MECHANICAL SPECIFICATIONS



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors