

DIGITRON SEMICONDUCTORS

UES1104 – UES1106 HIGH-EFFICIENCY RECTIFIERS

MAXIMUM RATINGS

	UES1104 - UES1106
Peak Inverse Voltage: UES1104 UES1105 UES1106	200V 300V 400V
Maximum Average D.C. Output Current: I_o @ T_A = 25°C (Free Air) @ T_L = 50°C, L = 3/8"	1A 2A
Surge Current (8.3ms)	20A
Thermal Resistance @ L = 3/8"	38°C/W
Operating & Storage Temperature Range	-55°C to +150°C

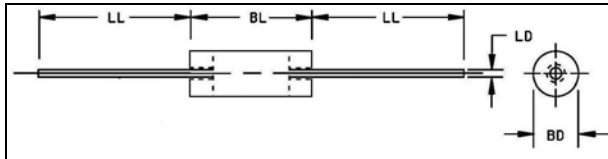
ELECTRICAL CHARACTERISTICS

Type	PIV	Maximum Forward Voltage		Maximum Reverse Current		Maximum Reverse Recovery Time*
		T _J = 25°C	T _J = 100°C	@ PIV, T _J = 25°C	T _J = 100°C	
UES1104 UES1105 UES1106	200V 300V 400V	1.25V @ 1A tp = 300µs	1.15V @ 1A tp = 300µs	10µA	200µA	50ns

*Measured in circuit I_F = 0.5A, I_R = 1A, I_{REC} = 0.25A

MECHANICAL CHARACTERISTICS

Case:	Glass
Marking:	Body Painted, Alpha-Numeric
Polarity:	Cathode Band



LTR.	Dimensions			
	UES1104 – UES1106			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	—	0.095	—	2.160
BL	—	0.250	—	6.350
LD	0.028	0.032	0.740	0.800
LL	0.700	—	17.800	—

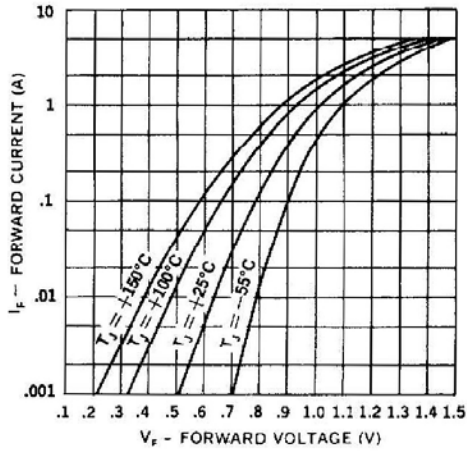
Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).

Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.

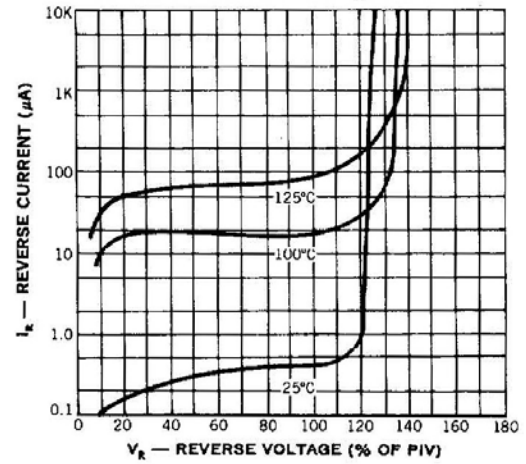
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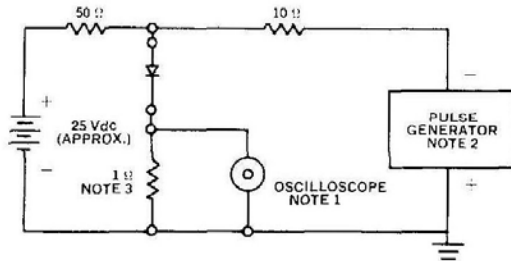
Typical Forward Current vs. Forward Voltage



Typical Reverse Current vs. Reverse Voltage



Reverse-Recovery Circuit



- NOTES:**
1. Oscilloscope: Rise time $\leq 3\text{ns}$; input impedance = 50Ω .
 2. Pulse Generator: Rise time $\leq 8\text{ns}$; source impedance 10Ω .
 3. Current viewing resistor, non-inductive, coaxial recommended.

Multiple Surge Current vs. Duration

