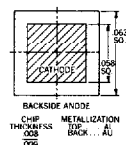


RECTIFIERS

UES1304
UES1305
UES1306

FEATURES

- Very Low Forward Voltage (1.15V)
- Very Fast Recovery Times (50nSec)
- Small Size
- High Surge



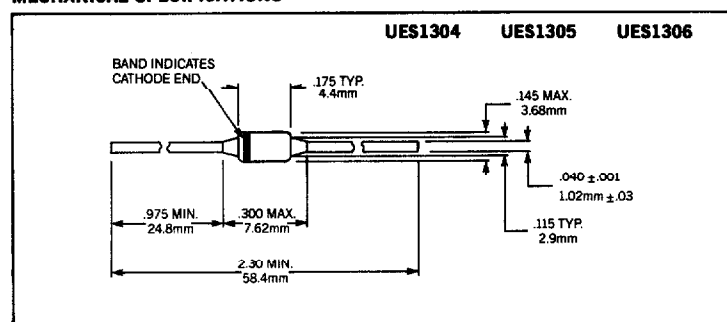
DESCRIPTION

The UES1304 series is specifically designed for operation in power switching circuits operating at frequencies of at least 20 KHz.

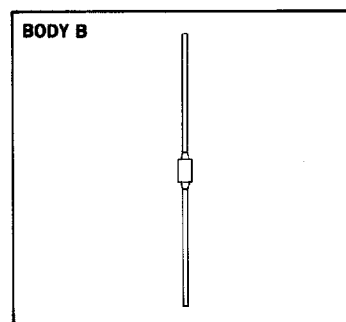
ABSOLUTE MAXIMUM RATINGS

ABSOLUTE MAXIMUM RATINGS	
Peak Inverse Voltage, UES1304	200V
Peak Inverse Voltage, UES1305	300V
Peak Inverse Voltage, UES1306	400V
Maximum Average DC Output Current, I_O	
@ $T_A = 25^\circ\text{C}$ (Free Air)	3A
@ $T_L = 50^\circ\text{C}$, $L = \frac{1}{2}''$	5A
Surge Current, 8.3mSec	70A
Thermal Resistance @ $L = \frac{1}{2}''$	20°C/W
Operating and Storage Temperature Range	-55°C to +150°C

MECHANICAL SPECIFICATIONS



THESE DEVICES ALSO AVAILABLE IN SURFACE MOUNT PACKAGE. SEE SECTION 10



4/79 (Rev. 1)

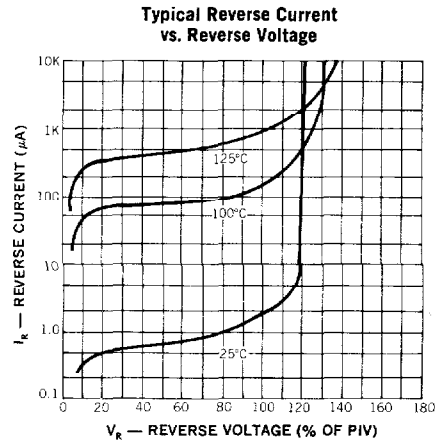
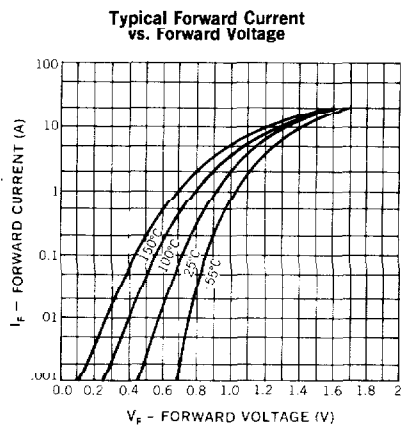
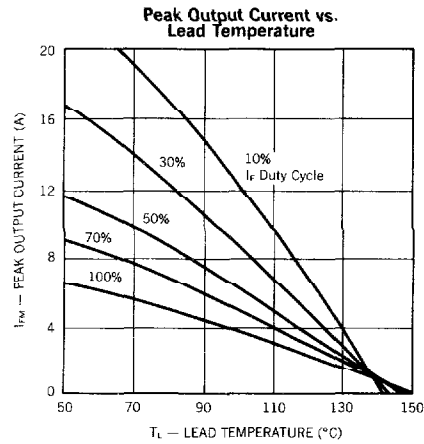
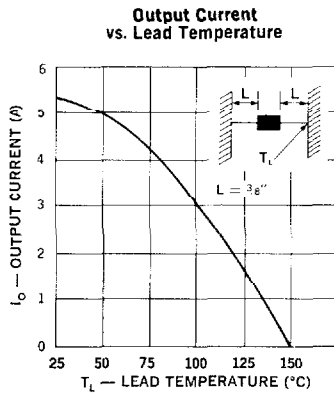
2-70

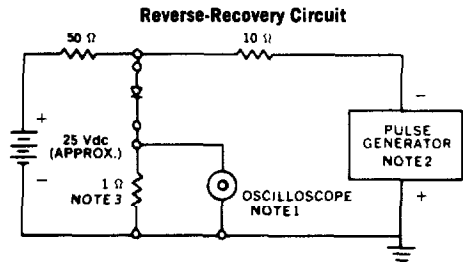
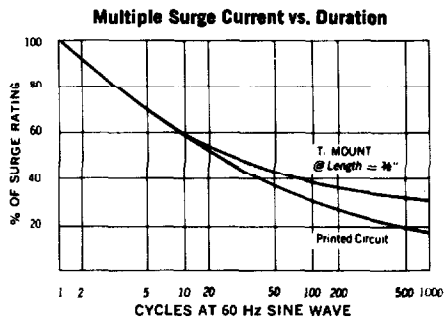
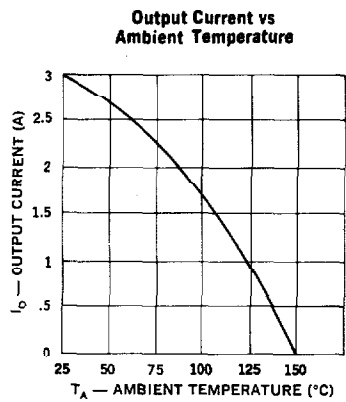
Microsemi Corp.
Watertown
The diode experts

ELECTRICAL SPECIFICATIONS

Type	PIV	Maximum Forward Voltage		Maximum Reverse Current		Maximum Reverse Recovery Time*
		$T_J = 25^\circ\text{C}$	$T_J = 100^\circ\text{C}$	@ PIV, $T_J = 25^\circ\text{C}$	$T_J = 100^\circ\text{C}$	
UES1304	200V	1.25V	1.15V	20 μA	500 μA	50nS
UES1305	300V	@ 3A	@ 3A			
UES1306	400V	$t_p = 300 \mu\text{s}$	$t_p = 300 \mu\text{s}$			

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





- NOTES:**
1. Oscilloscope: Rise time ≤ 3 ns; Input impedance = 50Ω.
 2. Pulse Generator: Rise time ≤ 8 ns; source impedance 10Ω.
 3. Current viewing resistor, non-inductive, coaxial recommended.