

RECTIFIER ASSEMBLIES

High Voltage Stacks, 1 Amp to 5 Amp,
Military Approved

JAN 1N5597
JAN 1N5600
JAN 1N5603

3

FEATURES

- Qualified to MIL-S-19500/404A
- PIV: to 10kV
- Surge Ratings: to 200A
- Current Ratings: to 5A
- Only Fused-in-Glass Diodes Used
- Controlled Avalanche Characteristics
- Modular Package For Easy Stacking

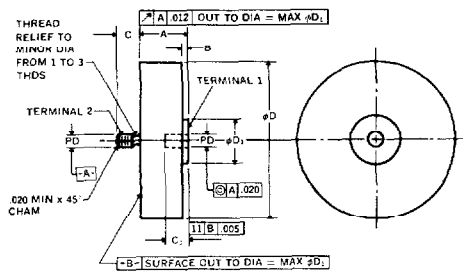
DESCRIPTION

This series of military high-voltage high-current stacks offers the utmost in reliability as required in military system designs. The rectifiers are assembled with diodes which have been subjected to TX type screening tests.

ABSOLUTE MAXIMUM RATINGS

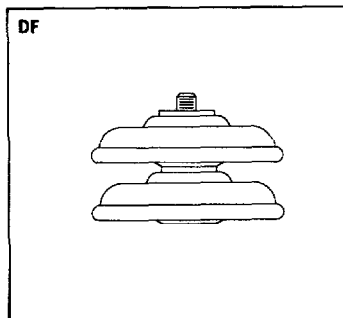
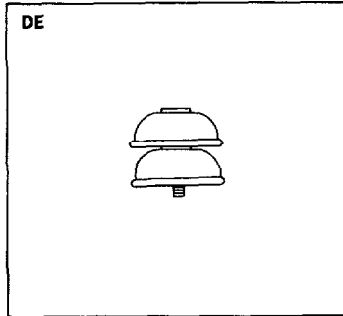
	JAN 1N5597	JAN 1N5600	JAN 1N5603
Peak Inverse Voltage	10kV	5kV	5kV
Maximum Average D.C. Output Current @ $T_C = 75^\circ\text{C}$	1A	2A	5A
Non-Repetitive Sinusoidal Surge (8.3ms) @ $T_C = 75^\circ\text{C}$	30A	80A	200A
Operating and Storage Temperature Range, T_C	-65°C to +150°C		

MECHANICAL SPECIFICATIONS



Ltr	JAN 1N5597		NOTES
	Dimensions in inches with metric equivalents (mm) in parentheses	Minimum	
A	.73 (18.54)	.83 (21.08)	8
B		.080 (2.03)	
C	.240 (6.10)	.264 (6.71)	2, 6
C ₁	.265 (6.73)	.400 (10.16)	4
phi D	1.85 (46.99)	1.95 (49.53)	
phi D ₁	.37 (9.40)	.67 (17.02)	

Ltr	JAN 1N5603		NOTES
	Dimensions in inches with metric equivalents (mm) in parentheses	Minimum	
A	.970 (24.64)	1.020 (25.91)	8
B	.050 (1.27)	.080 (2.03)	
C	.307 (7.80)	.317 (8.05)	3
C ₁	.318 (8.08)	.400 (10.16)	5, 7
phi D	3.450 (87.63)	3.650 (92.71)	
phi D ₁	.35 (8.89)	1.250 (31.75)	



1. All marking shall be on cathode side of module.
2. Threaded stud 1/4-28UNF-2A.
3. Threaded stud 3/8-24UNF-2A.
4. Threaded insert 1/4-28UNF-2B.

5. Threaded insert 3/8-24UNF-2B.
6. Cathode connected to terminal 2.
7. Cathode connected to terminal 1.
8. Module contour within dimension A is not specified.

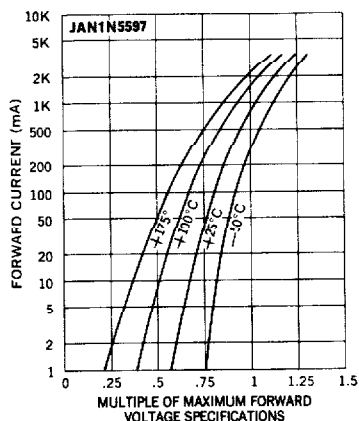
3-43

Microsemi Corp.
Watertown
The diode experts

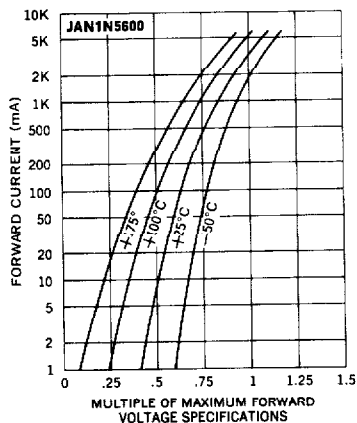
Electrical Specifications (at 25°C unless noted)

Type	PIV kV	Forward Voltage Drop		Maximum Leakage Current @ PIV		Capacitance @ $V_R = 100V$		Maximum Reverse Transient Energy Absorption joules
		Min.	Max.	$T_A = 25^\circ C$	$T_A = 100^\circ C$	Min.	Max.	
				μA	μA	pf	pf	
JAN 1N5597	10	13V @ 1A	19V @ 1A	1	75	5	30	2
JAN 1N5600	5	6V @ 2A	10V @ 2A	5	100	7	30	6
JAN 1N5603	5	6V @ 5A	10V @ 5A	5	100	15	40	12

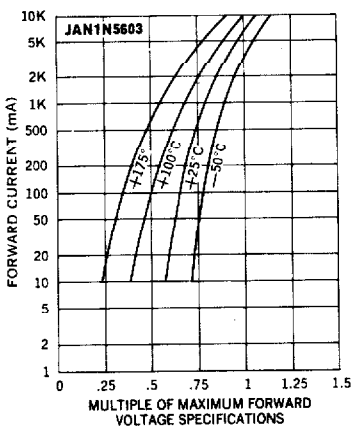
Typical Forward Voltage vs. Forward Current



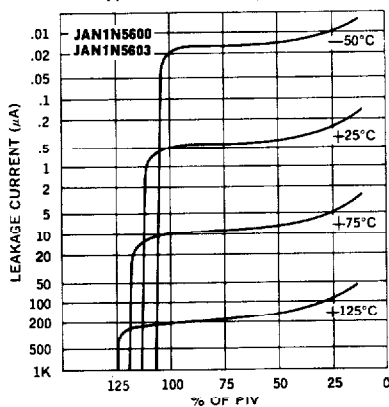
Typical Forward Voltage vs. Forward Current



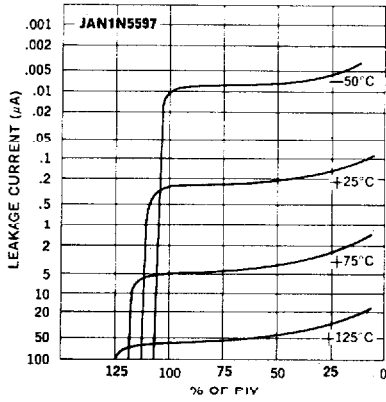
Typical Forward Voltage vs. Forward Current



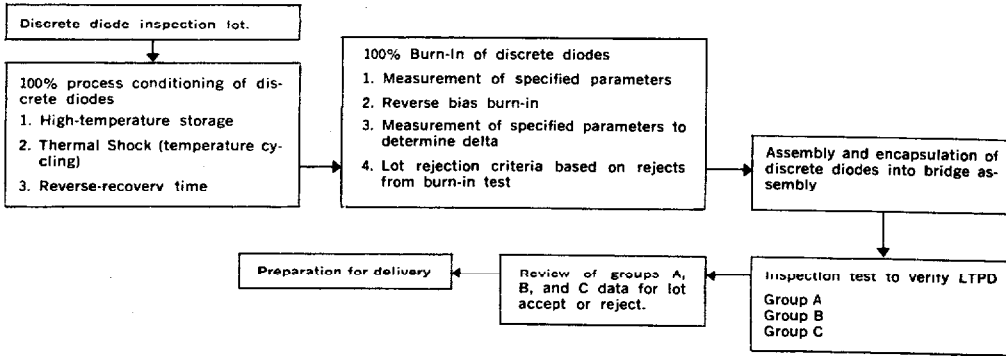
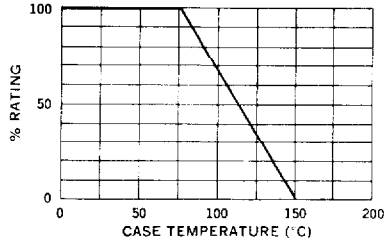
Typical Leakage Current vs. PIV



Typical Leakage Current vs. PIV



Current Derating Curve





LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.