VOIDLESS-HERMETICALLY-SEALED SURFACE MOUNT ULTRA FAST RECOVERY GLASS RECTIFIERS

ELECTRICAL CHARACTERISTICS @ 25°C

TYPE NUMBER	MINIMUM BREAK-DOWN VOLTAGE V_R I_R = 50 µA	MAXIMUM FORWARD VOLTAGE V_F @ I_F		WORKING PEAK REVERSE VOLTAGE V_{RWM}	MAXIMUM REVERSE CURRENT I_R @ V_{RWM}		MAXIMUM REVERSE RECOVERY TIME (LOW CURRENT) t_{rr} Note 1	MAXIMUM REVERSE RECOVERY TIME (HIGH CURRENT) t_{rr} Note 2	PEAK RECOVERY CURRENT I_{RM} (rec) I_F = 2 A, 100 A/µs Note 2	FORWARD RECOVERY VOLTAGE V_{FRM} Max I_F = 0.5 A t_r = 12 ns
					T_A=25°C	T_A=150°C				
	V	V @ A	V @ A	V	µA	µA	ns	ns	A	V
1N6626US	220	1.35V @ 2.0 A	1.50V @ 4.0 A	200	2.0	500	30	45	3.5	8
1N6627US	440	1.35V @ 2.0 A	1.50V @ 4.0 A	400	2.0	500	30	45	3.5	8
1N6628US	660	1.35V @ 2.0 A	1.50V @ 4.0 A	600	2.0	500	30	45	3.5	8
1N6629US	880	1.40V @ 1.4 A	1.70V @ 3.0 A	800	2.0	500	50	60	4.2	12
1N6630US	990	1.40V @ 1.4 A	1.70V @ 3.0 A	900	2.0	500	50	60	4.2	12
1N6631US	1100	1.60V @ 1.4 A	1.95V @ 2.0 A	1000	4.0	600	60	80	5.0	20

NOTE 1: Low Current Reverse Recovery Time Test Conditions: I_F=0.5A, I_{RM}=1.0A, $I_{R(REC)}$ = 0.25A per MIL-STD-750, Method 4031, Condition B.

NOTE 2: High Current Reverse Recovery Time Test Conditions: I_F = 2 A, 100 A/µs MIL-STD-750, Method 4031, Condition D.

SYMBOLS & DEFINITIONS

Symbol	Definition
V_{BR}	Minimum Breakdown Voltage: The minimum voltage the device will exhibit at a specified current.
V_{RWM}	Working Peak Reverse Voltage: The maximum peak voltage that can be applied over the operating temperature range.
V_F	Maximum Forward Voltage: The maximum forward voltage the device will exhibit at a specified current.
I_R	Maximum Reverse Current: The maximum reverse (leakage) current that will flow at the specified voltage and temperature.
C	Capacitance: The capacitance in pF at a frequency of 1 MHz and specified voltage.
t_{rr}	Reverse Recovery Time: The time interval between the instant the current passes through zero when changing from the forward direction to the reverse direction and a specified recovery decay point after a peak reverse current is reached.

CHARTS AND GRAPHS

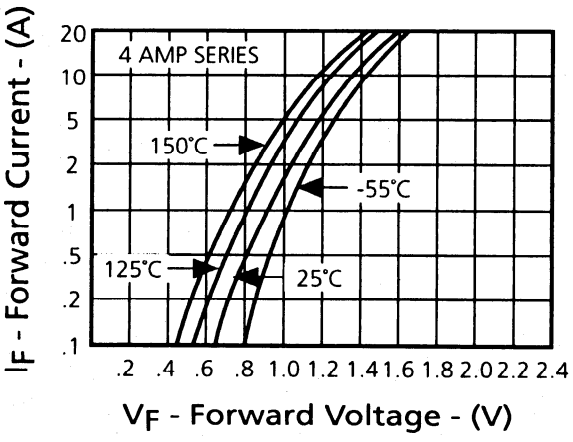


FIGURE 1
Typical Forward Current
vs
Forward Voltage

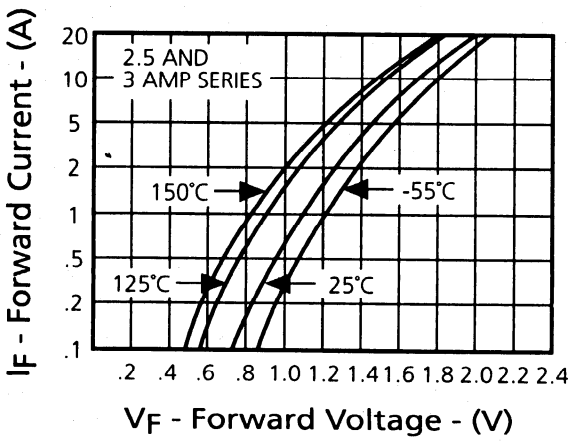


FIGURE 2
Typical Forward Current
vs
Forward Voltage

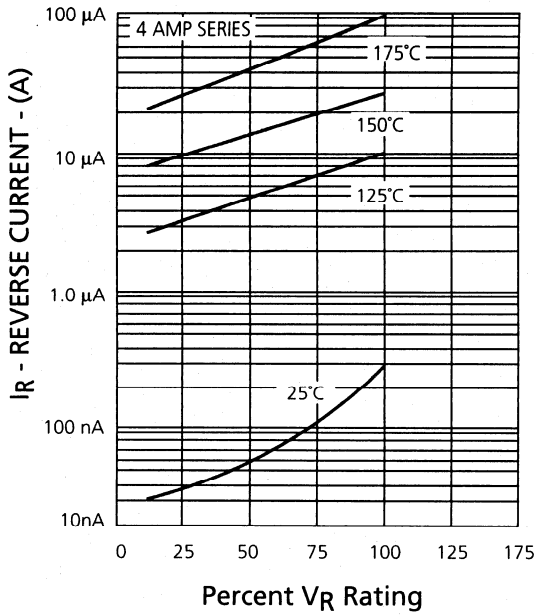


FIGURE 3
Typical Reverse Current vs.
Applied Reverse Voltage

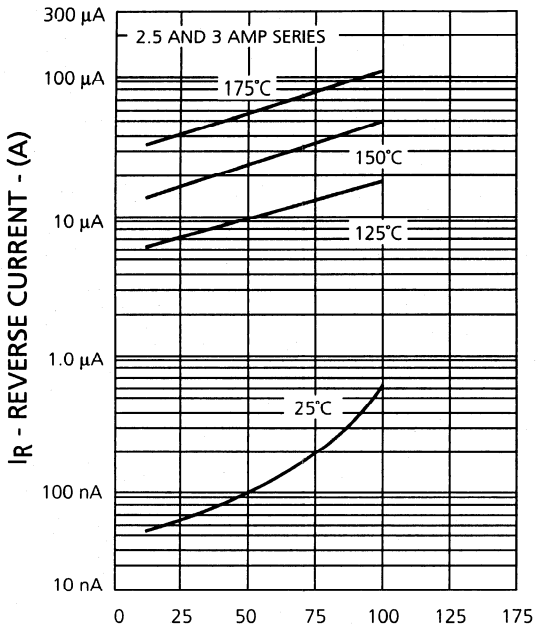


FIGURE 4
Typical Reverse Current vs.
Applied Reverse Voltage

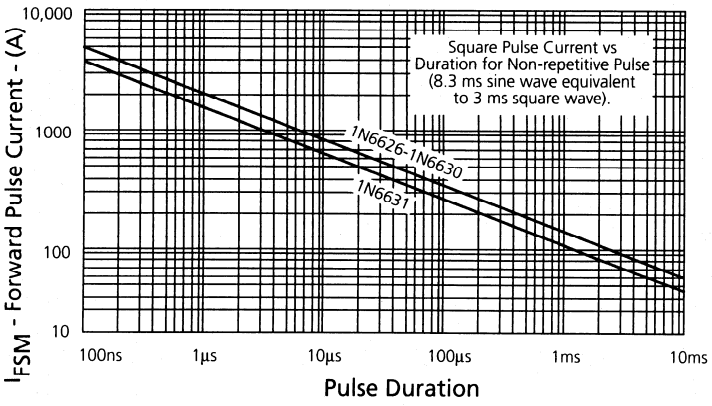


FIGURE 5
Forward Pulse Current vs.
Pulse Duration

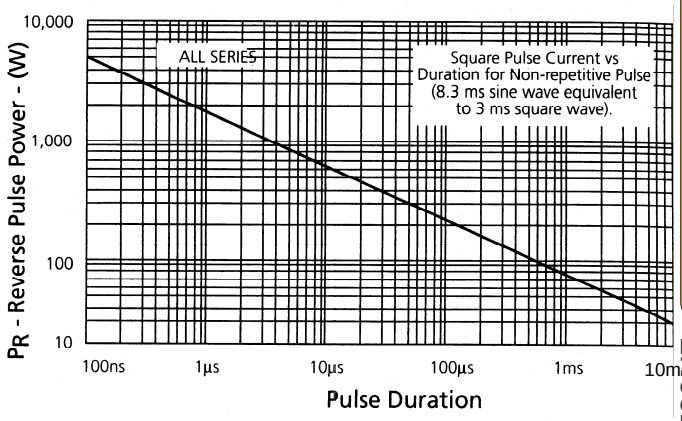
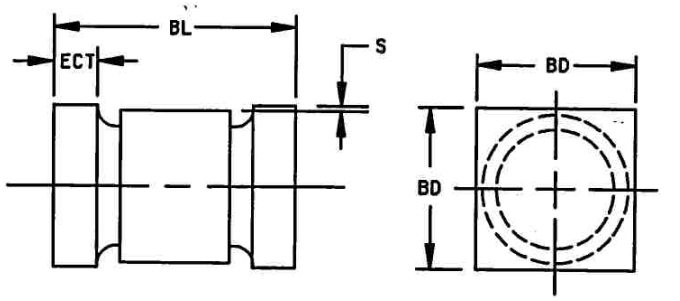
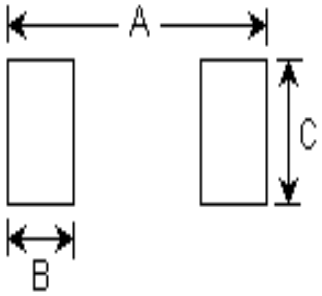


FIGURE 6
Reverse Pulse Power vs.
Pulse Duration

PACKAGE DIMENSIONS AND PAD LAYOUT





NOTE: This Package Outline has also previously been identified as “D-5B”

	INCHES		mm	
	MIN	MAX	MIN	MAX
BL	.200	.225	5.08	5.72
BD	.137	.148	3.48	3.76
ECT	.019	.028	0.48	0.711
S	.003	---	0.08	---

PAD LAYOUT

	INCHES	mm
A	0.288	7.32
B	0.070	1.78
C	0.155	3.94

Note: If mounting requires adhesive separate from the solder, an additional 0.080 inch diameter contact may be placed in the center between the pads as an optional spot for cement.