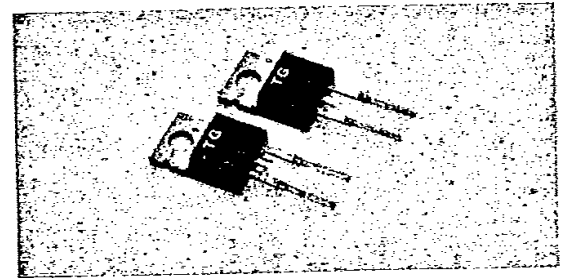




8 Amp Very Fast Recovery Rectifier

January 1984

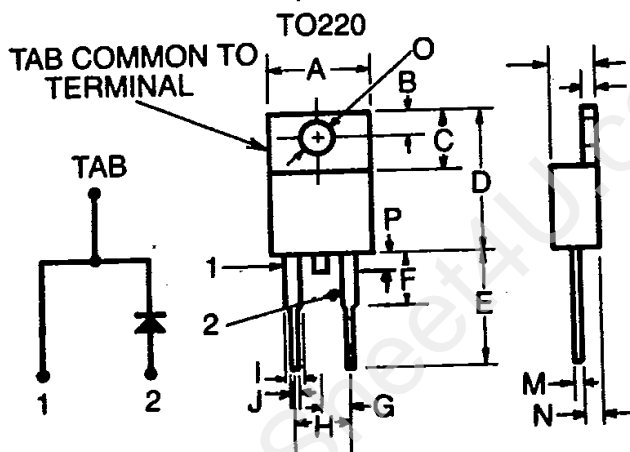
- 100 ns Recovery
- High Voltage
- High Junction Temperature
- Glass Passivated



MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)	SYMBOL	TG84	TG86	TG88	UNITS
Repetitive Peak Reverse Voltage	V_{RRM}	400	600	800	V
Forward Current (Average) @ $T_C = 75^\circ\text{C}$ (Fig. 1)	$I_{F(AV)}$	8			A
Peak Forward Surge Current, 1/2 Cycle, 60 Hz, per diode	I_{FSM}	100			A
Storage Temperature	T_{STG}	-55 to +150			$^\circ\text{C}$
Junction Operating Temperature	T_J	-55 to +150			$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS * (At $T_A = 25^\circ\text{C}$ unless otherwise noted)	SYMBOL		UNITS
Maximum Instantaneous (Fig. 2) Reverse Current at Rated V_{RRM}	I_R	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$	5 100 μA
Maximum Instantaneous Forward Voltage @ 8 Amp (Fig. 3)	V_F		1.80 V
Reverse Recovery Time $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{REC} = 0.25\text{A}$	t_{rr}		100 nsec.
Typical Junction capacitance, $V_R = 10\text{V}$ (Fig. 4)	C_V		40 pF
Thermal Resistance, Junction-To-Case	$R\theta_{jc}$		3.0 $^\circ\text{C}/\text{W}$

* V_{RRM} represents the minimum junction breakdown voltage. Lead spacing and printed wiring conductor clearances must be evaluated based on ambient conditions.



DIM (2)	INCHES	MILLIMETERS
A	0.415 Max	10.54 Max
B	.108	2.74
C	.248	6.3
D	0.605 Max	15.37 Max
E	0.552	14.02
F	0.240 Max	6.1 Max
G	0.100	2.54
H	0.200	5.08
I	0.050	1.27
J	0.032	0.81
K	.190 Max	4.83 Max
L	0.050	1.27
M	0.022	0.56
N	0.105	2.67
O	0.143	3.63
P	0.100 Max	2.54 Max

(2) Dimensions are typical values unless otherwise specified.

FIG. 1

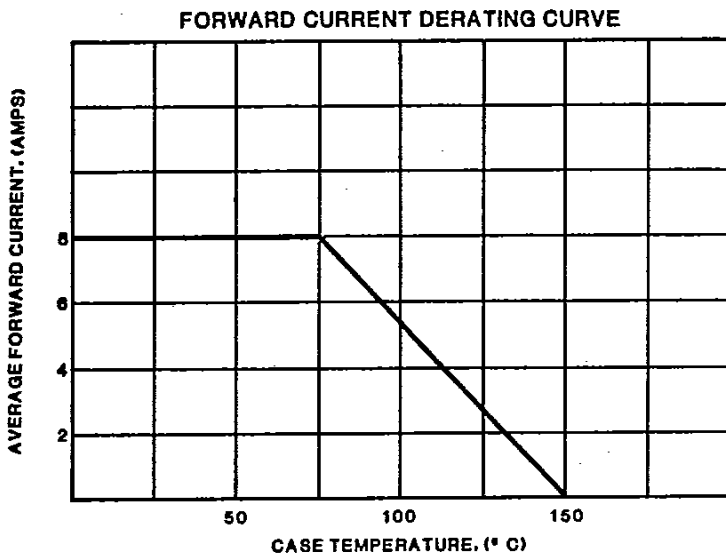


FIG. 3

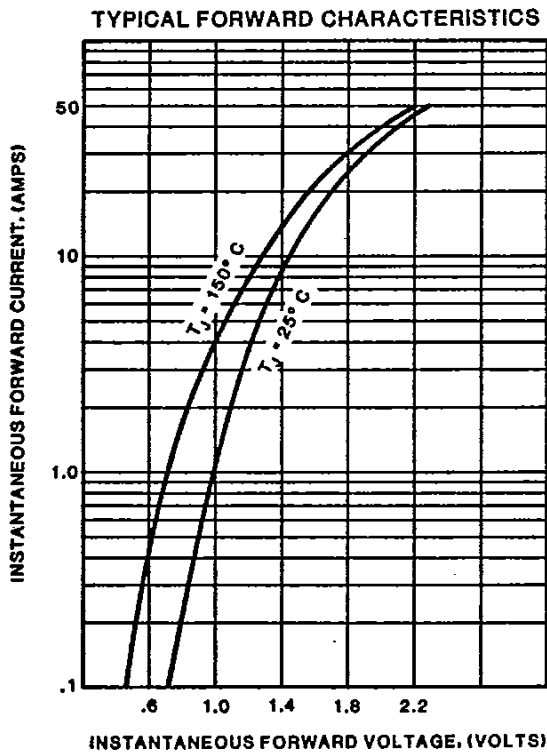


FIG. 2

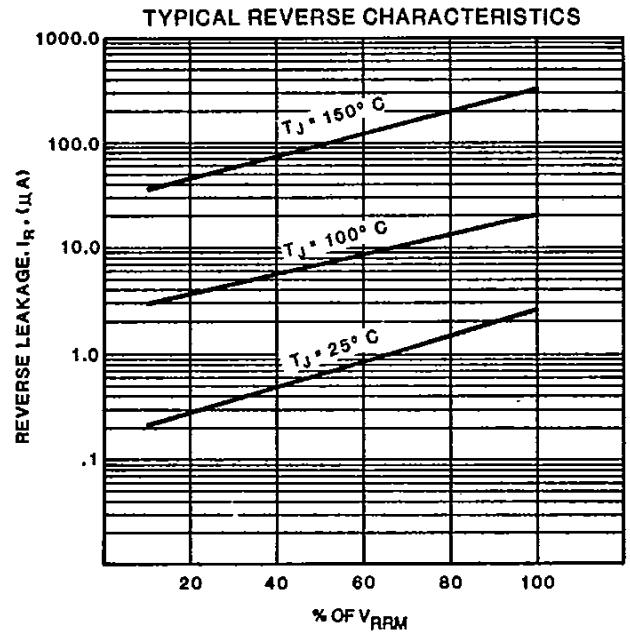
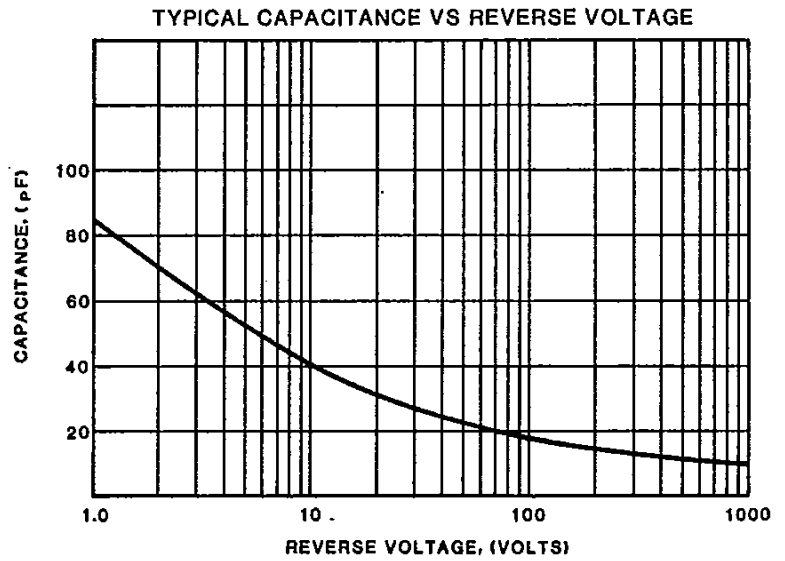
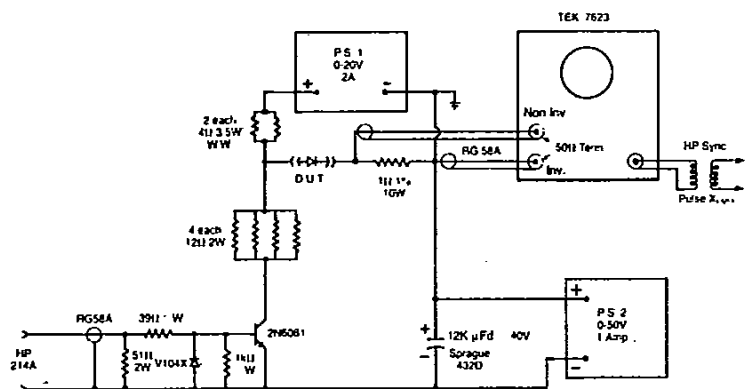


FIG. 4



TYPICAL RECOVERY TEST CIRCUIT



- NOTE:
1. H. P. 214A and scope must be transformer isolated from test circuit
 2. Signal coax to scope equal length
 3. Adjust P.S. 1 to desired I Forward
Adjust P.S. 2 to desired I Reverse
 4. H. P. 214A output
A. P.W. = .5 μ Sec
B. Pulse amplitude + 10V to + 15V as required to saturate 2N6081

RECOVERY WAVE FORM

