



T-23-07

20 Amp Epitaxial Center Tapped High Efficiency Rectifiers

50 Volt, 100 Volt, 150 Volt and 200 Volt V_{RRM}

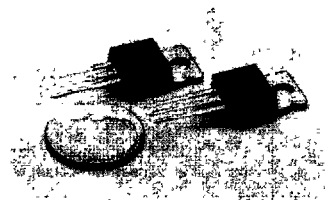
Low Thermal Resistance

Extremely Low Leakage at High Temperature

High Surge Capability

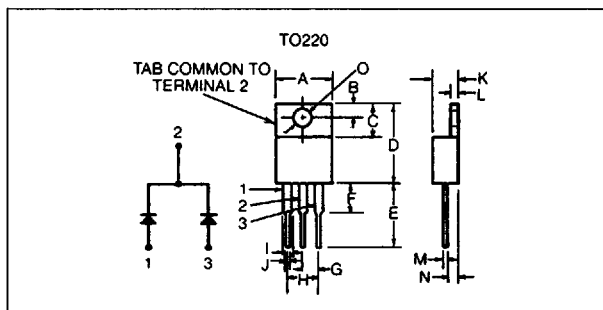
Very Fast Switching Speeds

Glass Passivated



LTR.	INCHES	MILLIMETERS
A	0.415 MAX.	10,54 MAX.
B	0.108	2,74
C	0.248	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	0.035	0,89
K	0.190 MAX.	4,83 MAX.
L	0.050	1,27
M	0.025 MAX.	0,64 MAX.
N	0.105	2,67
O	0.143	3,63

Inch tolerances $\pm .005$.



MAXIMUM RATINGS (At $T_J = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	VHE2401	VHE2402	VHE2403	VHE2404	UNITS
DC Blocking Voltage	V_{RM}	50	100	150	200	Volts
Working Peak Reverse Voltage	V_{RRM}					Volts
Peak Repetitive Reverse Voltage	V_{RRM}					Volts
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	Volts
Average Rectified Forward Current @ $T_C = 125^\circ\text{C}$	I_O	20				Amps
Peak Surge Current (non-rep), $\frac{1}{2}$ cycle, 60 Hz	I_{FSM}	150				Amps
Thermal Resistance, Junction to Case	R_{JC}	1.5				$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175				$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_J = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	$T_J = 25^\circ\text{C}$	$T_J = 100^\circ\text{C}$	UNITS
Maximum Instantaneous Forward Voltage per diode $I_F = 4\text{A}$ $I_F = 8\text{A}$ $I_F = 10\text{A}$ $I_F = 50\text{A}$	V_{FM}	0.9 0.975 1.0 1.4	0.8 0.895 0.92 1.3	Volts
Maximum Reverse Current at Rated V_{RM} $T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$ $T_J = 175^\circ\text{C}$	I_{RM}		5 50 500	μA
Maximum Reverse Recovery Time $I_F = \frac{1}{2}\text{A}, I_R = 1\text{A}, I_{RR} = 0.25\text{A}$	t_r		35	nsec
Typical Capacitance, $V_R = 10\text{V}$	C_J		75	pF

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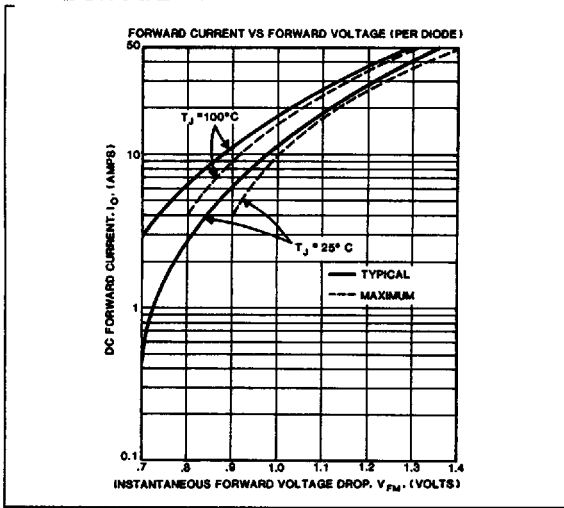


FIGURE 1

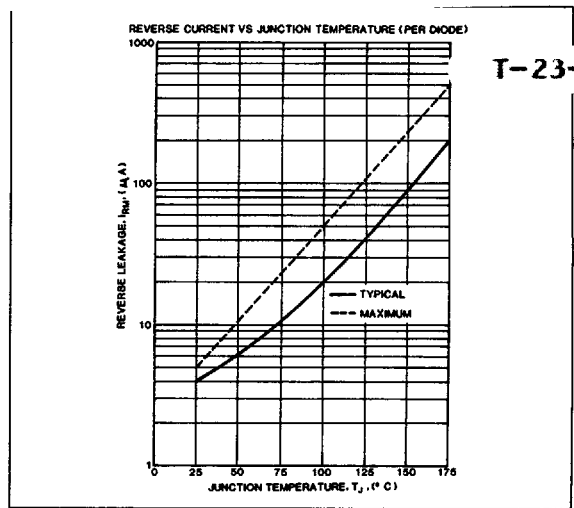


FIGURE 2

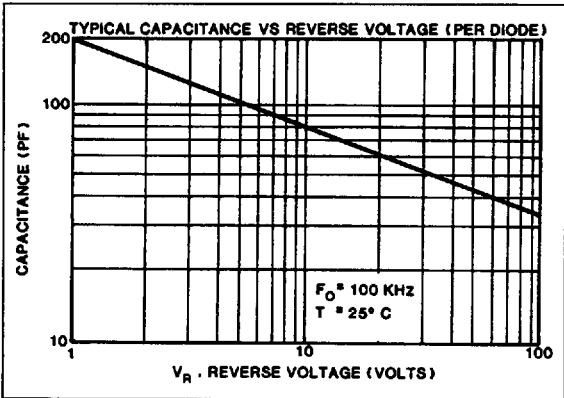


FIGURE 3

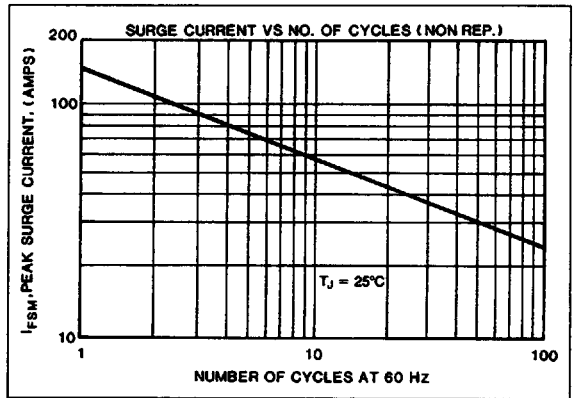


FIGURE 4

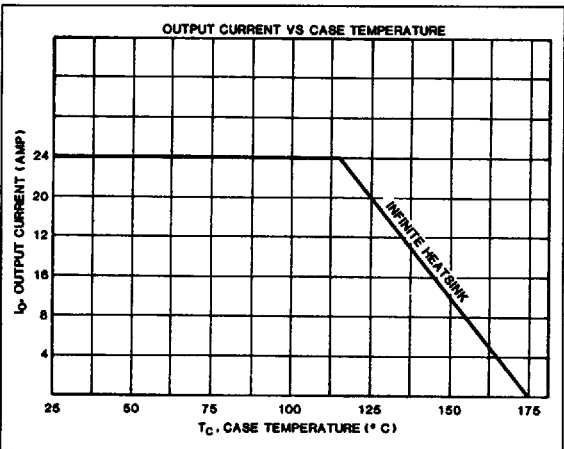


FIGURE 5