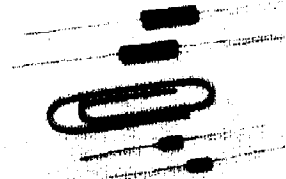
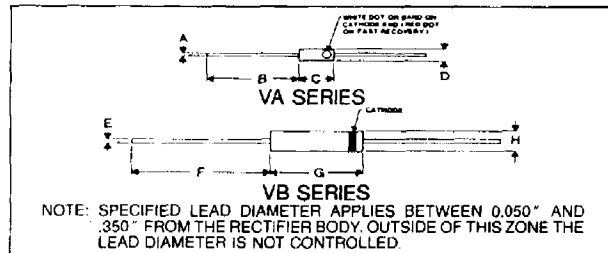


High Voltage Diffused Rectifiers VA & VB Series

1KV To 3.5KV V_{RRM} (VA Series)
1KV To 15 KV V_{RRM} (VB Series)
Low Leakage Current
Fast Recovery Series With 250 Nanosecond t_r
Minimum Sized Epoxy Encapsulation



LTR.	INCHES	MILLIMETERS
A	.015 Dia.	.381 Dia.
B	40 Min.	10.16 Min.
C	.150	3.81
D	.060 Dia.	1.52 Dia.
E	.020 Dia.	.51 Dia.
F	60 Min.	15.24 Min.
G	.40	10.16
H	.100 Dia.	2.54 Dia.



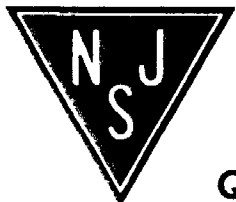
NOTE:
ALL PARTS MUST BE OVERMOLDED WITH HIGHLY FILLED EPOXY TO MEET THE STATED CURRENT RATINGS. TYPE VA PARTS ABOVE 1500V AND VB PARTS ABOVE 3000V MUST BE OVERMOLDED TO MEET V_{RRM} RATING. DIMENSIONAL TOLERANCES .XX ± .02", .XXX ± .005".

NOTE: SPECIFIED LEAD DIAMETER APPLIES BETWEEN 0.050" AND .350" FROM THE RECTIFIER BODY. OUTSIDE OF THIS ZONE THE LEAD DIAMETER IS NOT CONTROLLED.

NOTES:
1. SUFFIX "X" ADDED TO PART NUMBER DENOTES FAST RECOVERY.
2. MAXIMUM LEAD AND TERMINAL TEMPERATURE FOR SOLDERING 3/8" FROM CASE, 5 SECONDS AT 250°C.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS at $T_A = 25^\circ\text{C}$ (unless otherwise specified)

STANDARD TYPES								
MQSI PART NO.	Repetitive Peak Reverse Voltage V_{RRM} (Volts)	Peak Surge Current 1/2 Cycle at 60 Hz I_{FSM} (Amps)	DC Forward Current at $T_A = 50^\circ\text{C}$ I_o (mA) (Fig. 1)	Ambient Operating Temperature Range T_A ($^\circ\text{C}$)	Max. Forward Voltage Drop @ 10mA (Volts)	Max. Reverse Current At Rated V_{RRM} I_{RRM} (μA) (Fig. 2)	Max. Reverse Current At Rated V_{RRM} I_{RRM} (μA)	t_r (max) $I_f = 2 \text{ ma}$ $I_R = -4 \text{ ma}$ $I_{RRM} = -1 \text{ ma}$ (ns) (Fig. 3)
VA-10	1000	3	140	-55 to +150	4	.05	5.0 at $T_A = 100^\circ\text{C}$	NA
VA-15	1500		140		4			
VA-20	2000		140		4			
VA-25	2500		140		4			
VA-30	3000		140		6			
VA-35	3500		140		6			
VB-10	1000		150		5			
VB-20	2000		150		5			
VB-30	3000		80		10			
VB-40	4000		80		10			
VB-50	5000	80	10					
VB-60	6000	80	10					
VB-75	7500	60	16					
VB-100	10000	50	18					
FAST RECOVERY TYPES								
VA-10X	1000	3	70	-55 to +135	6	0.3	10.0 at $T_A = 100^\circ\text{C}$	250 nsec
VA-15X	1500		70		6			
VA-20X	2000		70		6			
VA-25X	2500		70		8			
VA-30X	3000		70		8			
VB-10X	1000		80		6			
VB-20X	2000		80		6			
VB-30X	3000		40		12			
VB-40X	4000		40		12			
VB-50X	5000		40		12			
VB-75X	7500	25	18					
VB-100X	10,000	25	20					
VB-150X	15,000	1	5	42				



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

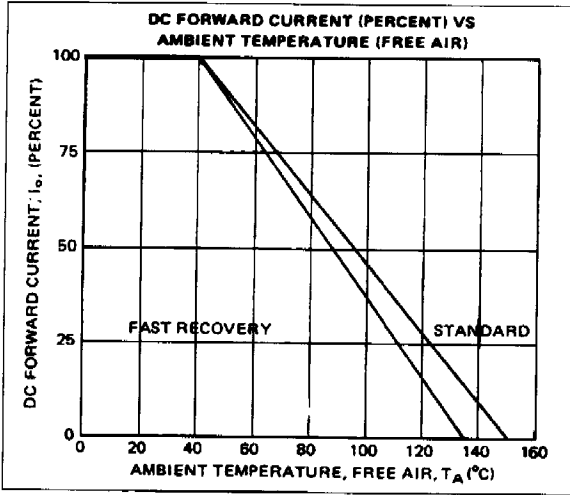


FIGURE 1

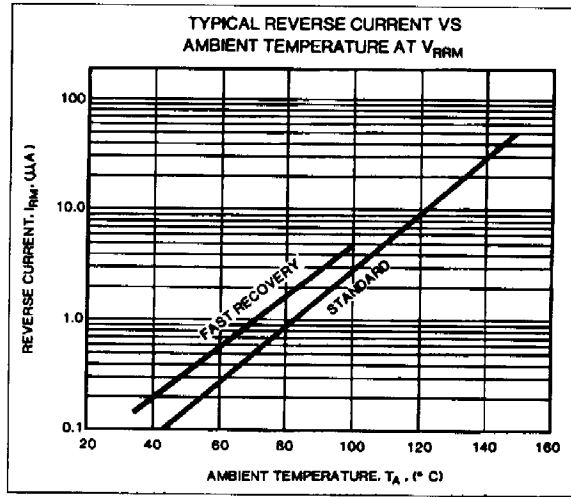


FIGURE 2

