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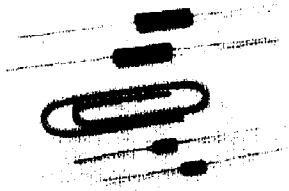
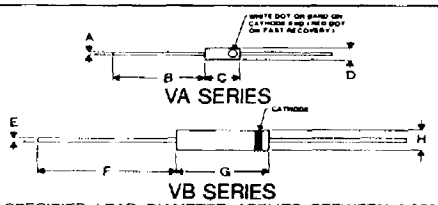
High Voltage Diffused Rectifiers VA & VB Series

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_{rr}
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°C (unless otherwise specified)

MQSI PART NO.	Repetitive Peak Reverse Voltage V_{RRM} (Volts)	Peak Surge Current ½ Cycle at 60 Hz I_{FSM} (Amps)	DC Forward Current at T_A = 50°C I_o(mA) (Fig. 1)	Ambient Operating Temperature Range T_A (°C)	Max. Forward Voltage Drop @ 10mA (Volts)	Max. Reverse Current At Rated V_{RRM} I_{RM} (μA) (Fig. 2)	Max. Reverse Current At Rated V_{RRM} I_{RM}(μA)	t_{rr}(max) I_F = 2 ma I_R = − 4 ma I_{RR} = − 1 ma (ns) (Fig. 3)
STANDARD TYPES								
VA-10	1000	3	140	− 55 to + 150	4	.05	5.0 at T_A = 100°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°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			

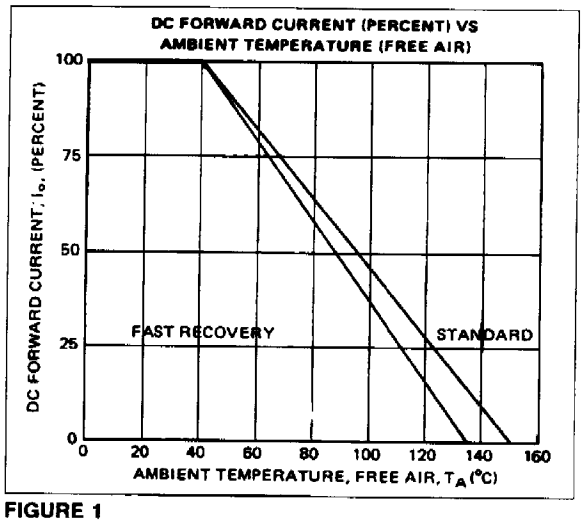


FIGURE 1

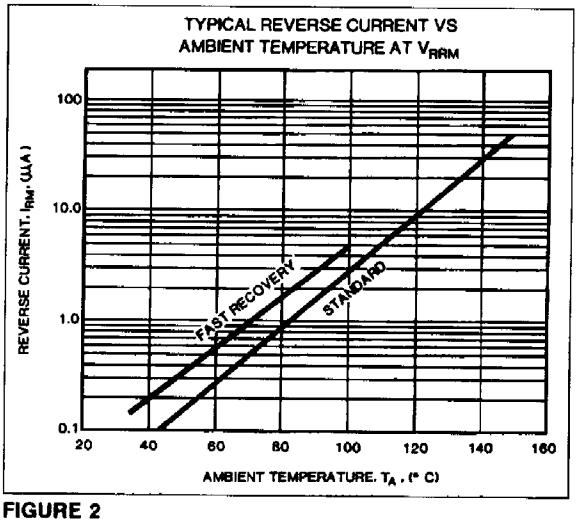


FIGURE 2