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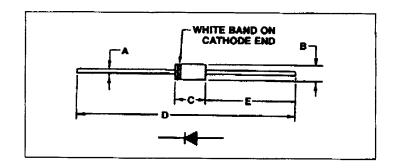
VSK Series

5 Amp Schottky Rectifiers

150°C MAX TJ

20 Volt, 30 Volt and 40 Volt V_{RRM} .450 Volt V_F at $I_F=5.0$ Amp Very Fast Switching Speed Minimum Sized, Low Cost Epoxy Encapsulation

LTR.	INCHES	MILLIMETERS
A	.048052	1,221,32 Dia.
В	.190225	4,83-5,72
l Č	.36–.37	9,14-9,40
l D	2.6–2.8	66,0~71,1
E	1.137-1.237	28,33–31,42



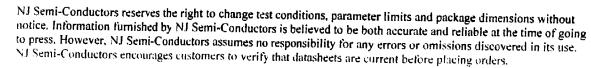
MAXIMUM RATINGS (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL. Verm Verm Verm Verm	VSK520 20	VSK530	VSK540 40	UNITS Volts
DC Blocking Voltage Working Peak Reverse Voltage Peak Repetitive Reverse Voltage					
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	Volts
Average Rectified Forward Current (Fig. 5 & 6)	6	5.0		Amps	
Ambient Temp. @ Rated V _{RM} , R _{NA} ≤ 16° C/W	TA	70	65	60	•c
Peak Surge Current (non-rep), 300µs Pulse Width (Fig. 4)	IPSM	500			Amps
Peak Surge Current (non-rep), 1/2 cycle, 60Hz (Fig.4)	FSM		Amps		
Operating Junction Temperature	T,		•c		
Storage Temperature	T _{stG}	-65 to +150		·c	

 $^{^{\}circ}V_{PM} \leq 0.1 V_{RM} Max, R_{6JA} \leq 12^{\circ}C/W$

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS Maximum Instantaneous Forward Voltage Drop (1) See Fig. 2 for Typical v _F I _F = 3.0 Amps I _F = 5.0 Amps I _F = 15.0 Amps		SYMBOL V _F	VSK520	VSK530	VSK540	UNITS
			.400 .450 .625			Volts
Maximum Instantaneous Reverse Current at Rated V _{RM} See Fig. 1 for Typical I _R	T _J = 25°C T _J = 100°C	I _n		10 75		mA



Quality Sami-Canducker

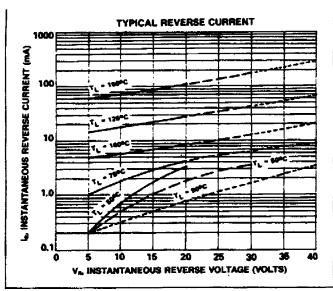


FIGURE 1

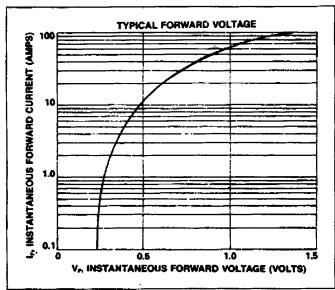


FIGURE 2

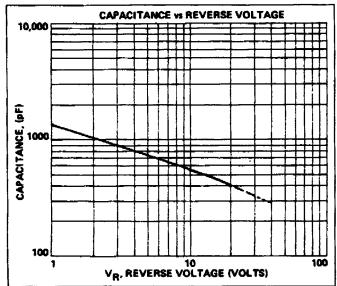
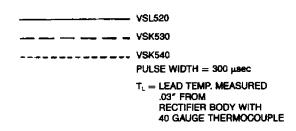
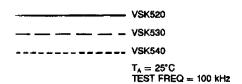


FIGURE 3



PULSE WIDTH = 300 μsec $T_A = 26^{\circ}C$



The current flow in a Schottky barrier rectifier is due to majority carrier conduction and is not affected by reverse recovery transients due to stored charge and minority carrier injection as in conventional PN diodes.

The Schottky barner rectifier may be considered for purposes of circuit analysis, as an ideal diode in parallel with a variable capacitance equal in value to the junction capacitance. See Figure 3.