

70 Amp HV Schottky Rectifier

50, 60, 80, & 100 Volt V_{RRM}

0.86 Volts at $I_F = 70$ Amps

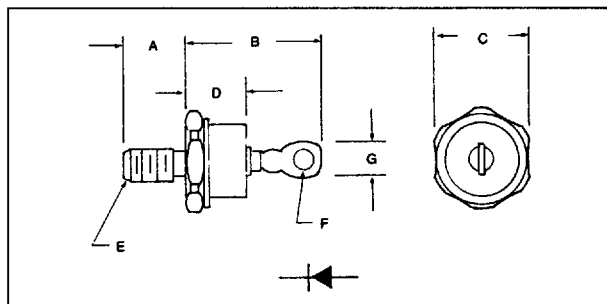
Low Leakage at High Temperature

High Surge Capability

DO5 Package

JEDEC Package 203AB (formerly DO-5)

DIM.	MILLIMETERS		INCHES	
	Min.	Max.	Min.	Max.
A	10,72	11,50	.422	.453
B	19,05	25,40	.750	1.000
C	17,00	17,47	.669	.688
D	—	11,43	—	.450
E	1/4-28 UNF-2A	—	1/4-28 UNF-2A	—
F	3,56	4,44	.140	.175
G	—	9,52	—	.375



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

RATING	SYMBOL	VSK 70100	VSK 7080	VSK 7060	VSK 7050	UNITS
DC Blocking Voltage	V_{RM}	100	80	60	50	VOLTS
Working Peak Reverse Voltage	V_{RRM}					
Peak Repetitive Reverse Voltage	V_{RRM}					
RMS Reverse Voltage	$V_{R(RMS)}$	71	56	42	35	VOLTS
Average Rectified Forward Current $T_C = 85^\circ\text{C}$ (3) (See Figure 3)	I_O	70.0				AMPS
Peak Surge Current (non-rep) 1/2 cycle, 60 Hz	I_{FSM}	1000				AMPS
Operating and Storage Junction Temperature Range	T_J, T_{STG}	-65 to +150				$^\circ\text{C}$
Thermal Resistance, Junction to case	$R_{\theta JC}$	0.8				$^\circ\text{C/W}$

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

RATING	SYMBOL	VSK 70100	VSK 7080	VSK 7060	VSK 7050	UNITS
Maximum Instantaneous Forward Voltage @ $I_F = 70$ Amps (See Fig. 1 for typical V_F)	V_F	$T_J = 25^\circ\text{C}$ 0.86	$T_J = 100^\circ\text{C}$ 0.80	$T_J = 150^\circ\text{C}$ 0.75		VOLTS
Maximum Instantaneous Reverse Current at V_R $T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$ $T_J = 150^\circ\text{C}$ (See Figure 2 for typical I_R)	I_R		20.0 50.0 100.0			mA
Typical Junction Capacitance, $V_R = 10\text{V}$ (See Figure 4)	C_J		1100			pF

TYPICAL FORWARD CHARACTERISTICS
(PER DIODE)

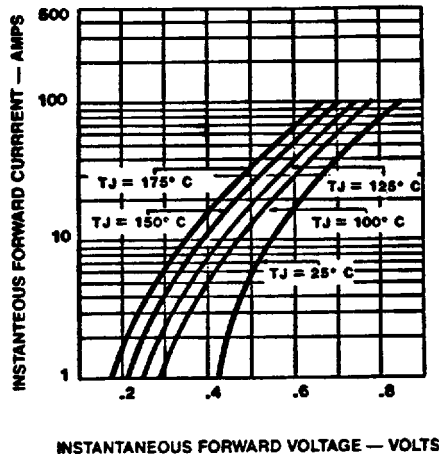


FIGURE 1

TYPICAL REVERSE CHARACTERISTICS
(PER DIODE)

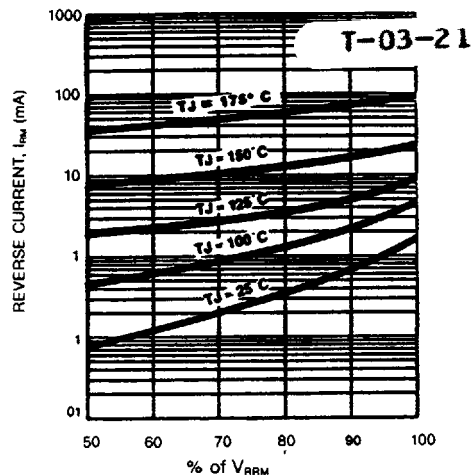


FIGURE 2

AVERAGE CURRENT DERATING CURVE

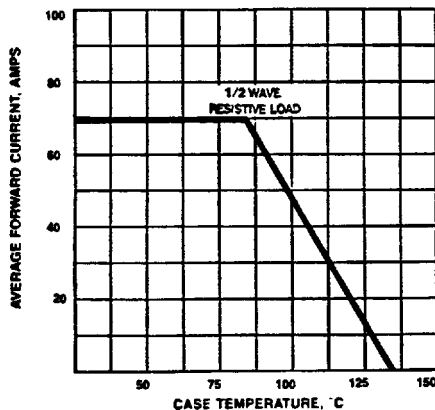


FIGURE 3

TYPICAL JUNCTION CAPACITANCE
(PER DIODE)

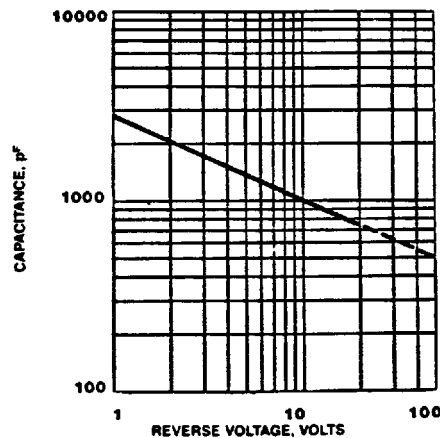


FIGURE 4