SF4001GP THRU SF4007GP

SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER
VOLTAGE:50 TO 1000V CURRENT: 1.0A

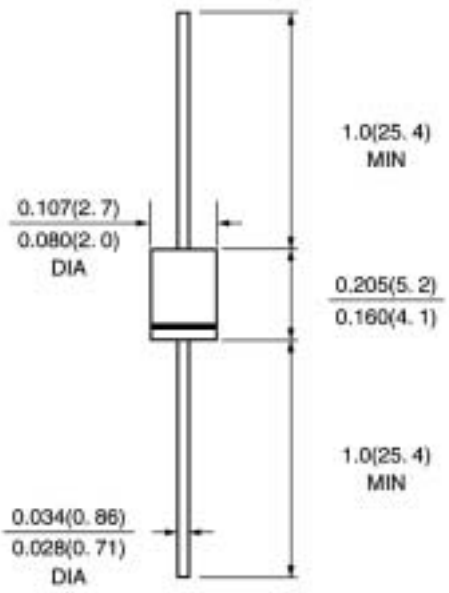
FEATURE

High temperature metallurgically bonded construction
Sintered glass cavity free junction
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed
350°C /10sec/0.375"lead length at 5 lbs tension
Operate at Ta =55°C with no thermal run away
Typical Ir<0.2μA
Low power loss, high efficient

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any

DO-41\DO-204AL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

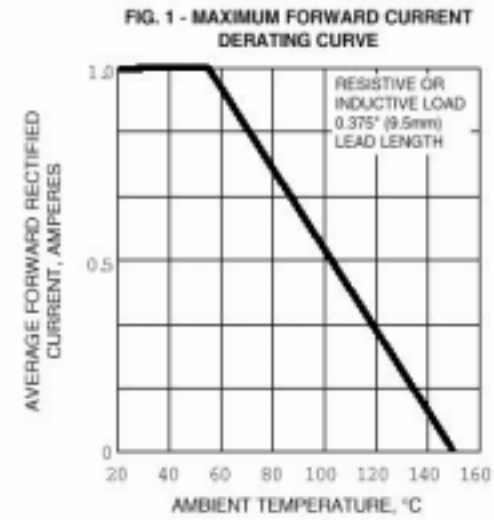
(single-phase, half wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

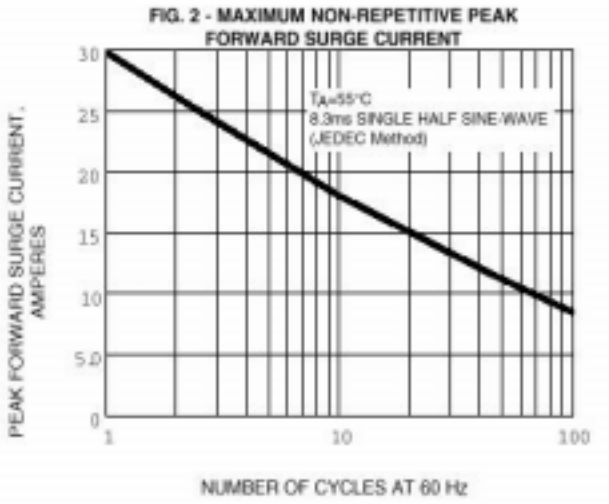
	SYMBOL	SF4001GP	SF4002GP	SF4003GP	SF4004GP	SF4005GP	SF4006GP	SF4007GP	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30							A
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.0				1.7			V
Maximum full load reverse current full cycle average at 55°C Ambient	Ir(av)	50							μA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	10 50							μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75			nS
Typical Junction Capacitance (Note 2)	Cj	17				15			pF
Typical Thermal Resistance (Note 3)	R(ja)	50				60			°C /W
Storage and Operating Temperature Range	Tstg, Tj	-65 to +175							°C

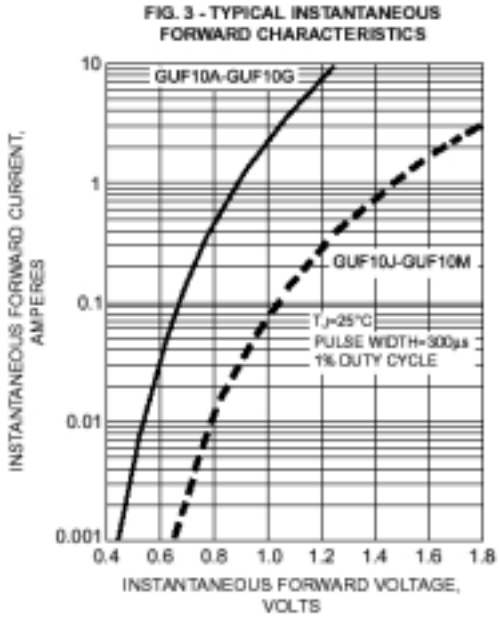
Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

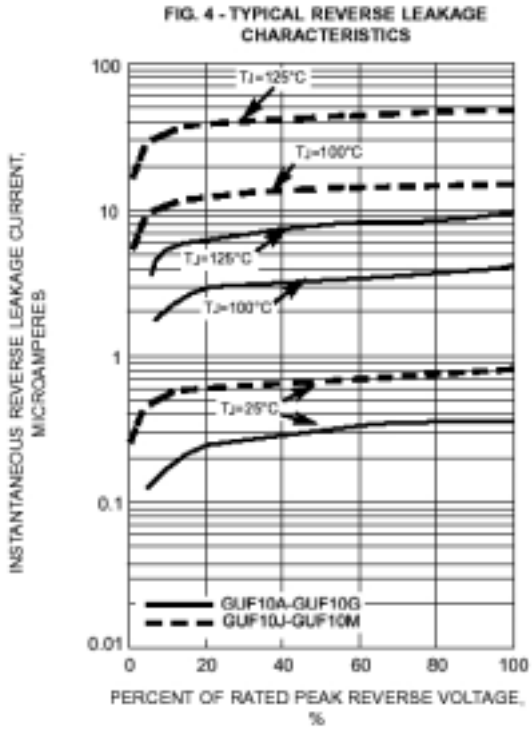
RATINGS AND CHARACTERISTIC CURVES SF4001GP THRU SF4007GP

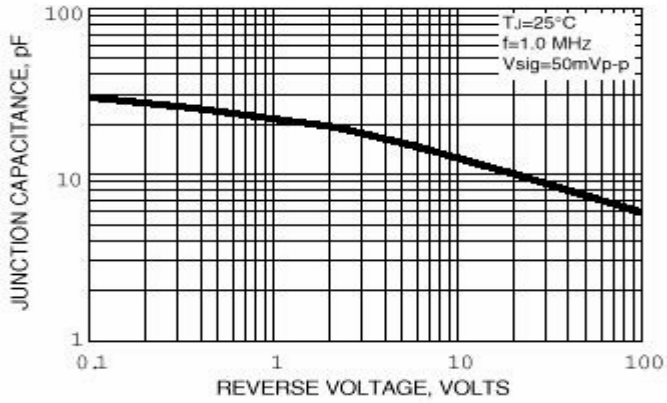
[1]











[1] Rev.A1, 25-Oct-05