

SBYV26A THRU SBYV26G

SINTERED GLASS JUNCTION SURFACE MOUNTED RECTIFIER

VOLTAGE: 200 to 1400V

CURRENT: 1.0A



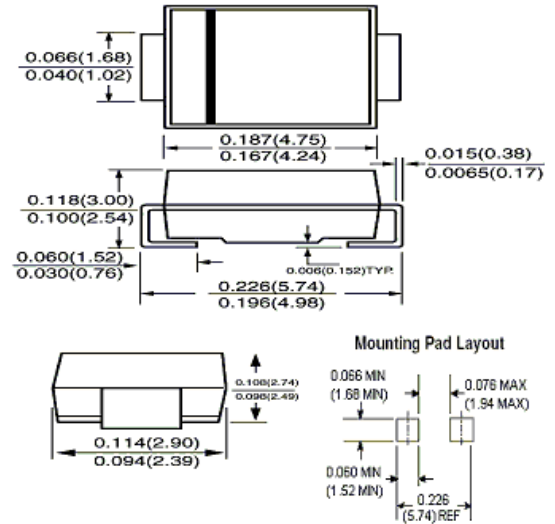
FEATURE

Ideal for surface mount automotive applications
 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<0.1µA

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
 Marking: **V26A V26B V26C V26D V26E V26F V26G**

GF1/ DO-214BA



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	SBYV 26A	SBYV 26B	SBYV 26C	SBYV 26D	SBYV 26E	SBYV 26F	SBYV 26G	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	1200	1400	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	700	840	980	V
Maximum DC blocking Voltage	V_{DC}	200	400	600	800	1000	1200	1400	V
Reverse avalanche breakdown voltage at IR = 0.1 mA	$V_{(BR)R}$	300 min	500 min	700 min	900 min	1100 min	1300 min	1500 min	V
Maximum Average Forward Rectified current $T_L = 120^\circ C$	I_{FAV}	1.0							A
Non-repetitive Peak Forward Current at t=10ms half sine wave	I_{FSM}	30							A
Maximum Forward Voltage at rated Forward Current	V_F	2.5					2.15		V
Non-repetitive peak reverse avalanche energy (Note 1)	E_{RSM}	10							mJ
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =165°C	I_R	5.0 150.0							µA
Maximum Reverse Recovery Time (Note 2)	T_{rr}	30			75		150		nS
Diode Capacitance (Note 3)	C_j	15.0							pF
Typical Thermal Resistance (Note 4)	$R_{th}(ja)$	100							°C / W
Storage and Operating Junction Temperature	T_{stg}, T_j	-65 to +175							°C

Note: 1. R=400mA; Tj=Tjmax prior to surge; inductive load switched off
 2. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
 4. Thermal Resistance from Junction to Ambient and from junction to lead, P.C.B. Mounted on 0.2×0.2" (5.0×5.0mm) copper pad areas

Fig. 1 – Maximum Forward Current Derating Curve

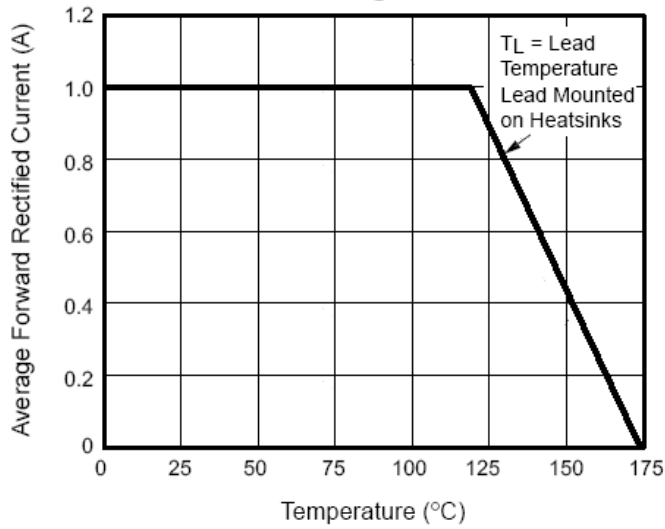


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

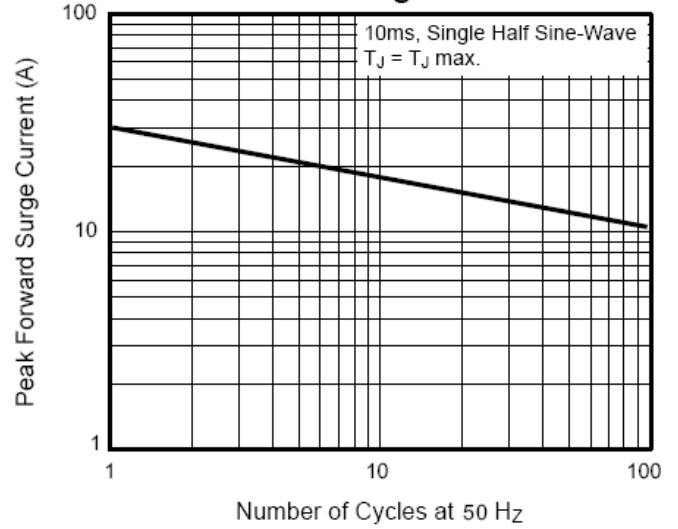


Fig. 3 – Typical Instantaneous Forward Voltage Characteristics

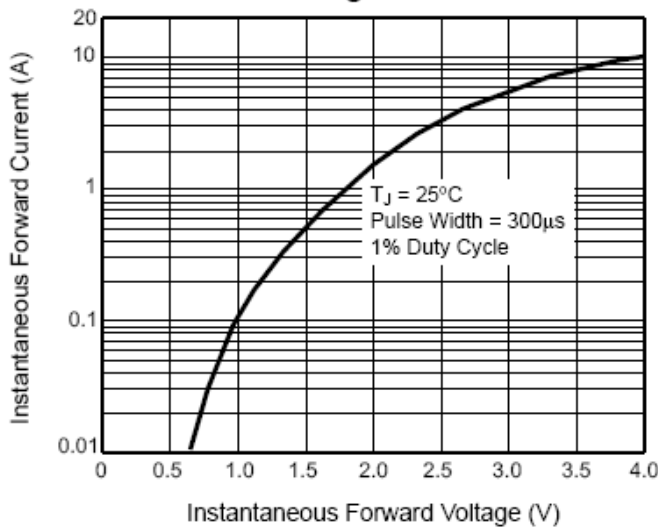


Fig. 4 – Typical Reverse Leakage Characteristics

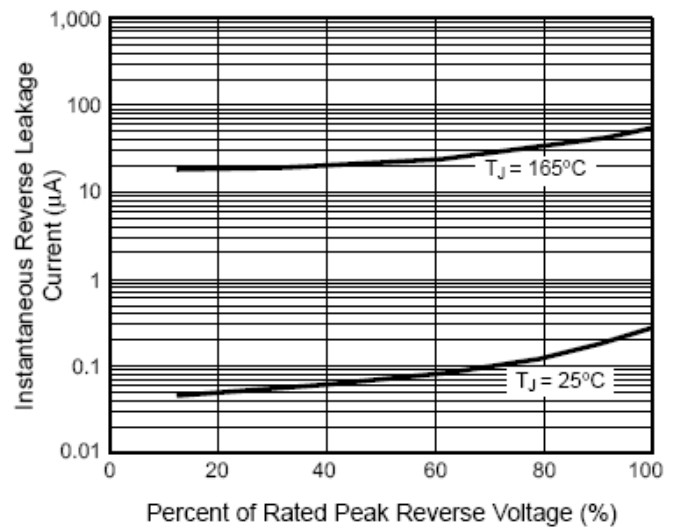


Fig. 5 – Typical Junction Capacitance

