

# SBYV26A THRU SBYV26G

## SINTERED GLASS JUNCTION SURFACE MOUNTED RECTIFIER

VOLTAGE: 200 to 1400V

CURRENT: 1.0A



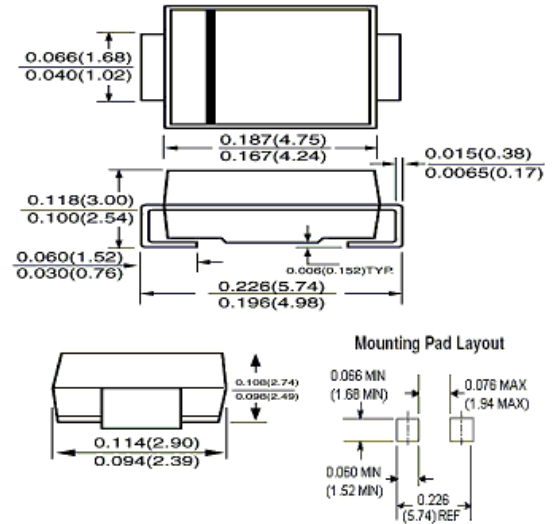
### FEATURE

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)

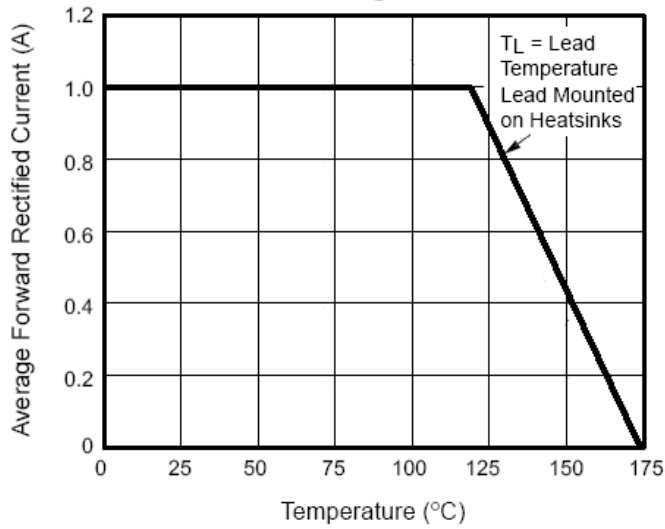
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

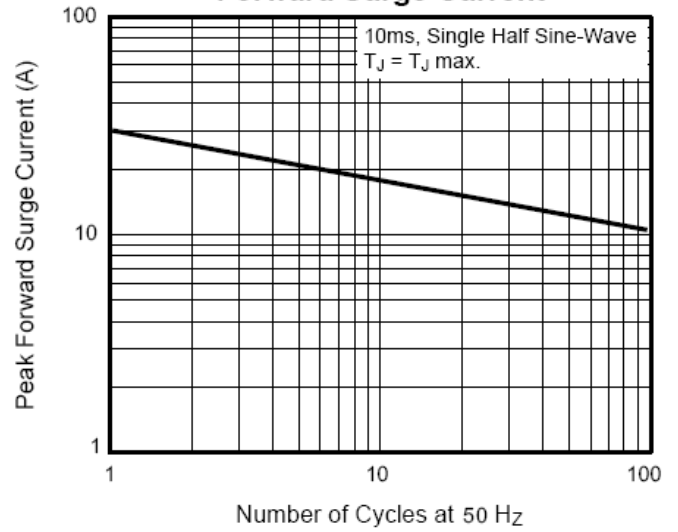
	SYMBOL	SBYV 26A	SBYV 26B	SBYV 26C	SBYV 26D	SBYV 26E	SBYV 26F	SBYV 26G	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	400	600	800	1000	1200	1400	V
Maximum RMS Voltage	$V_{RMS}$	140	280	420	560	700	840	980	V
Maximum DC blocking Voltage	$V_{DC}$	200	400	600	800	1000	1200	1400	V
Reverse avalanche 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

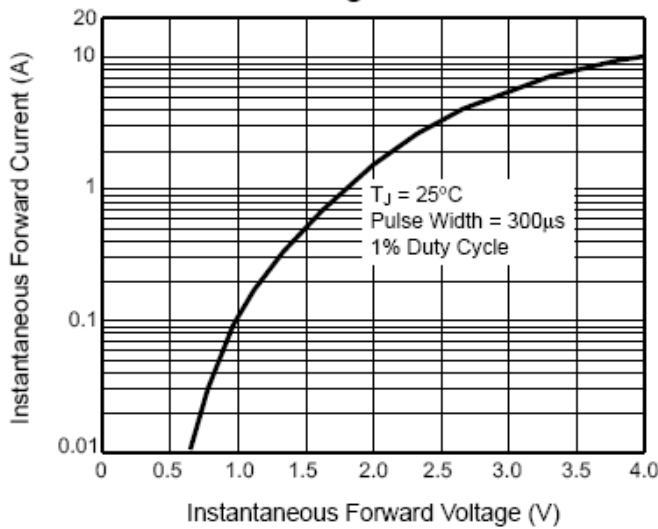
**Fig. 1 – Maximum Forward Current Derating Curve**



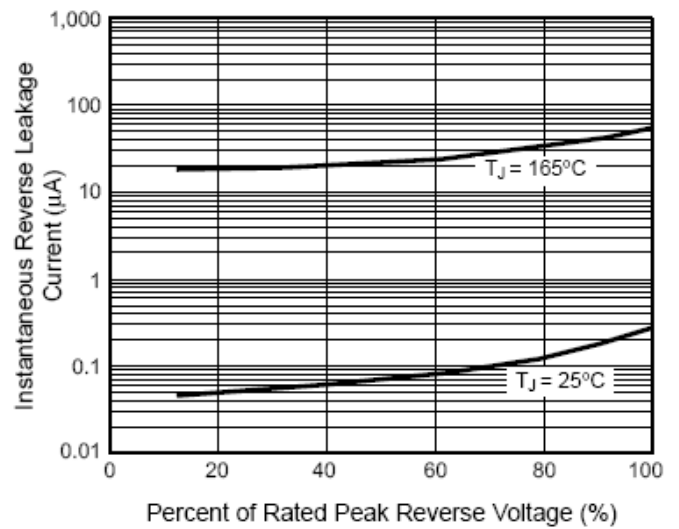
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 – Typical Instantaneous Forward Voltage Characteristics**



**Fig. 4 – Typical Reverse Leakage Characteristics**



**Fig. 5 – Typical Junction Capacitance**

