

HVSF100

PRV : 10000 Volts
Io : 100 mA

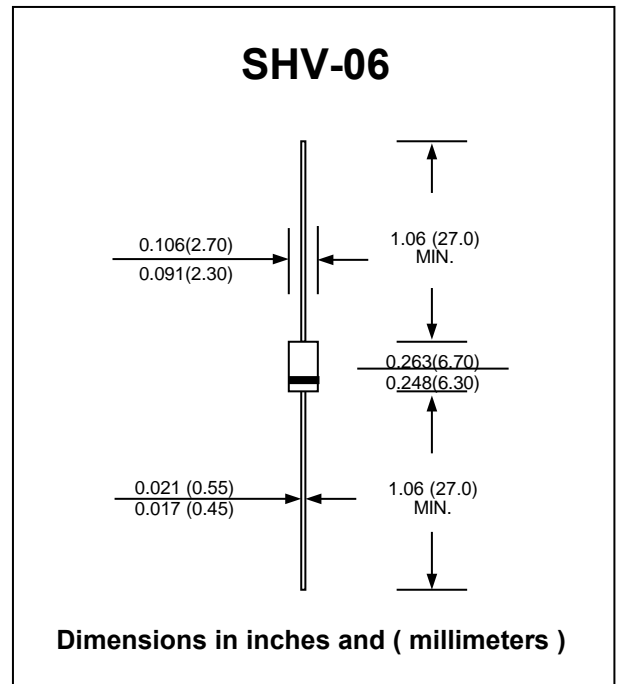
FEATURES :

- * Glass pasivated junction chip
- * High surge current capability
- * High voltage capability
- * High reliability
- * Low reverse current
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : SHV-06 Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any

GLASS PASSIVATED HIGH VOLTAGE SUPERFAST RECOVERY RECTIFIER



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	10000	V
Maximum RMS Voltage	V_{RMS}	7000	V
Maximum DC Blocking Voltage	V_{DC}	10000	V
Maximum Average Forward Current at $T_a = 25\text{ °C}$	$I_{F(AV)}$	100	mA
Maximum Peak Forward Surge Current , 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	10	A
Maximum Peak Forward Voltage at $I_F = 10\text{ mA}$	V_F	20	V
Maximum DC Reverse Current $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage $T_a = 100\text{ °C}$	I_R	5	μA
	$I_{R(H)}$	100	μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	100	nS
Junction Temperature Range	T_J	- 40 to + 150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	- 40 to + 150	$^{\circ}\text{C}$

Note :

(1) Reverse Recovery Test Conditions : $I_F = 2\text{ mA}$, $I_R = 4\text{ mA}$

RATING AND CHARACTERISTIC CURVES (HVSF100)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

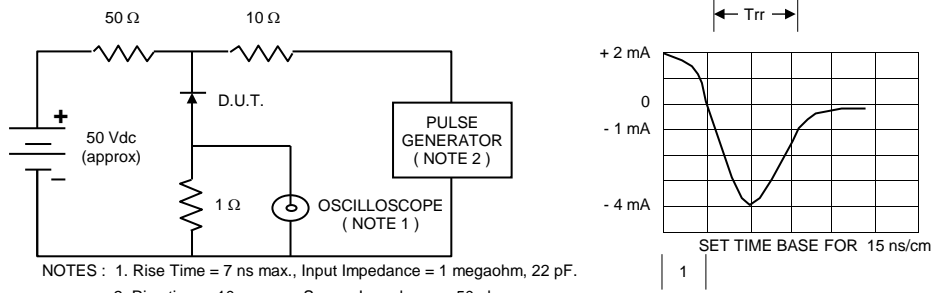


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

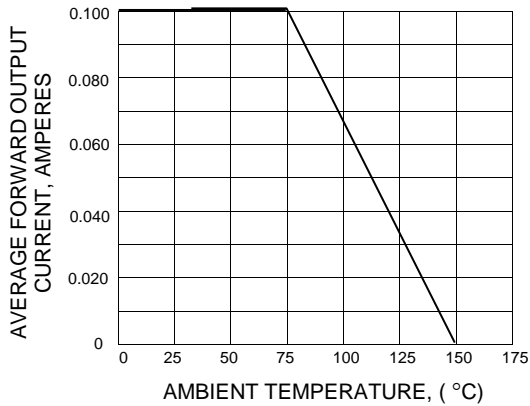


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

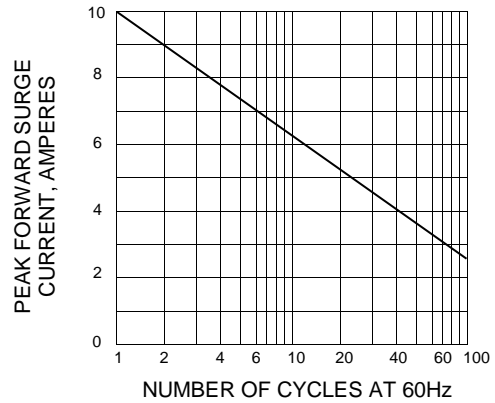


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

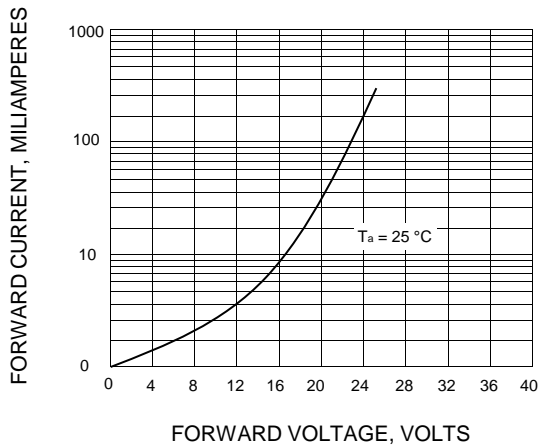


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

