

GLASS PASSIVATED FAST RECOVERY RECTIFIERS

BY396G-BY399G

Vishay General Semiconductor

FEATURES

- The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0
- Fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: DO-27 molded plastic body

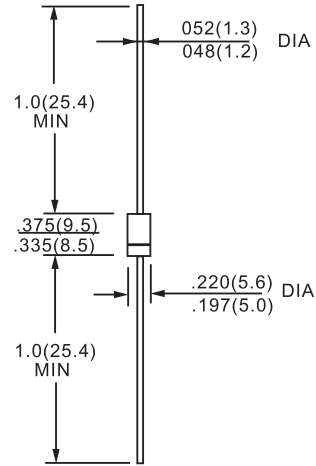
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.012 ounce, 1.10 grams

DO-27



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

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

Characteristic	Symbols	BY396G	BY397G	BY398G	BY399G	Units
Maximum recurrent peak reverse voltage	VRRM	100	200	400	800	Volts
Maximum RMS voltage	VRMS	70	140	280	560	Volts
Maximum DC blocking voltage	VDC	100	200	400	800	Volts
Maximum average forward rectified current R load at TA=50°C	I(AV)	3.0				Amps
Peak forward surge current 10ms single half sine-wave superimposed on rated load at TA=25°C	IFSM	100.0				Amps
Maximum instantaneous forward voltage at 3.0A	VF	1.3				Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR				µA
	TA=125°C	125				
Maximum reverse recovery time (Note 1)	Trr	250				ns
Max.thermal resistance	RθJA	30				°C/W
Typical junction capacitance (Note 2)	CJ	25.0				pF
Operating junction and storage temperature range	TJ TSTG	-65 to +175				°C

Notes:

(1) Test conditions: IF=0.5A, IR=1.0A, Irr=0.25A.

(2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.

FIG.1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

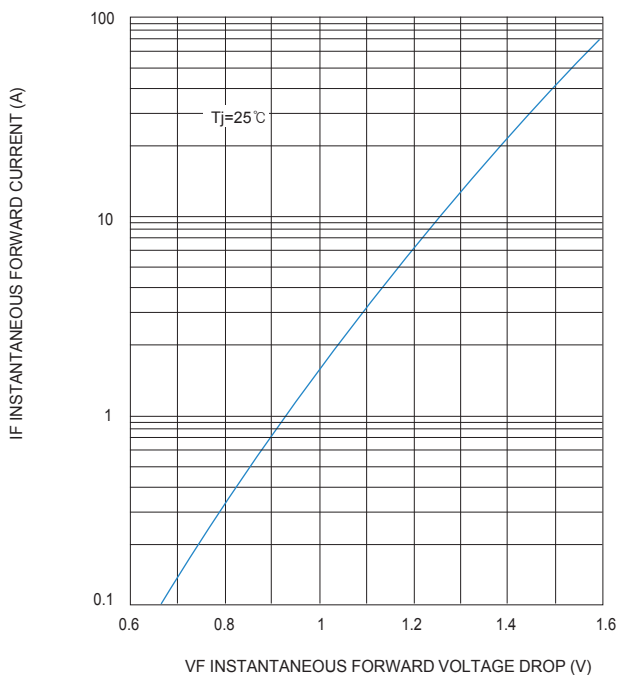


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

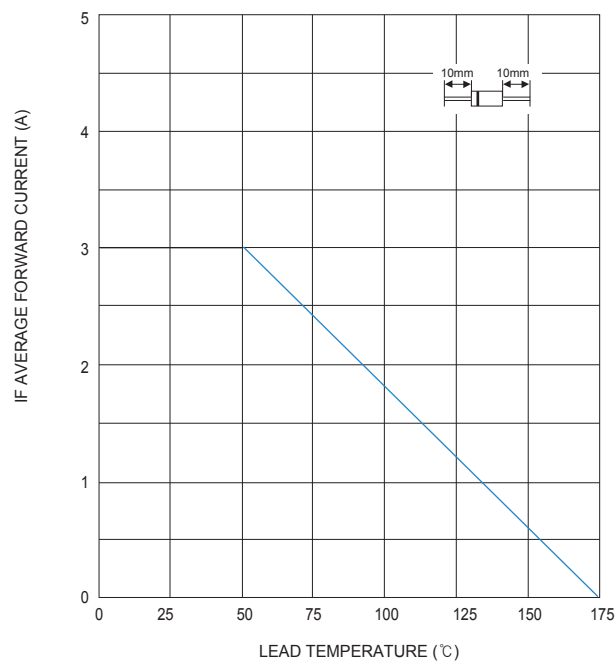


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

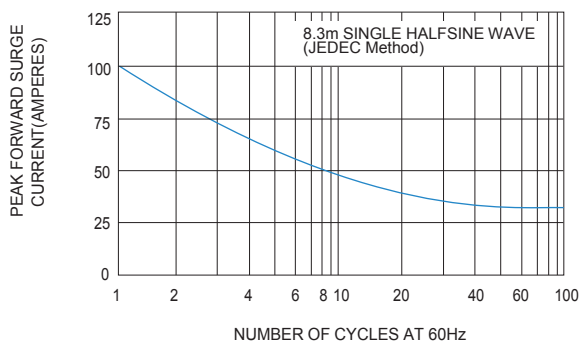


FIG.4-TYPICAL JUNCTION CAPACITANCE

