TAYCHIPST

GLASS PASSIVATED FAST RECOVERY RECTIFIERS

BY396G-BY399G

100V-800V

2.0A

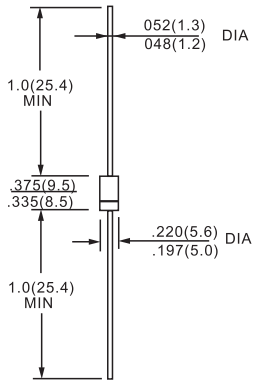
FEATURES

- 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℃/10 seconds,0.375″(9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: DO-201AD 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℃ ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

		Symbols	BY396G	BY397G	BY398G	BY399G	Units
Maximum recurrent peak reverse voltage		V_{RRM}	100	200	400	800	Volts
Maximum RMS voltage		V_{RMS}	70	140	280	560	Volts
Maximum DC blocking voltage		V_{DC}	100	200	400	800	Volts
Maximum average forward rectified current R load at T_A=50℃		$I_{(AV)}$	3.0				Amps
Peak forward surge current 10ms single half sine-wave superimposed on rated load at T_A=25℃		I_{FSM}	100.0				Amps
Maximum instantaneous forward voltage at 3.0A		V_F	1.3				Volts
Maximum DC reverse current at rated DC blocking voltage	T_A=25℃	I_R	5.0				μA
	T_A=125℃		125				
Maximum reverse recovery time (Note 1)		Trr	250				ns
Max.thermal resistance		$R_{\Theta JA}$	30				℃/W
Typical junction capacitance (Note 2)		C_J	25.0				pF
Operating junction and storage temperature range		T_J T_{STG}	-65 to +175				℃

Notes:
(1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.
(2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.

FIG.1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

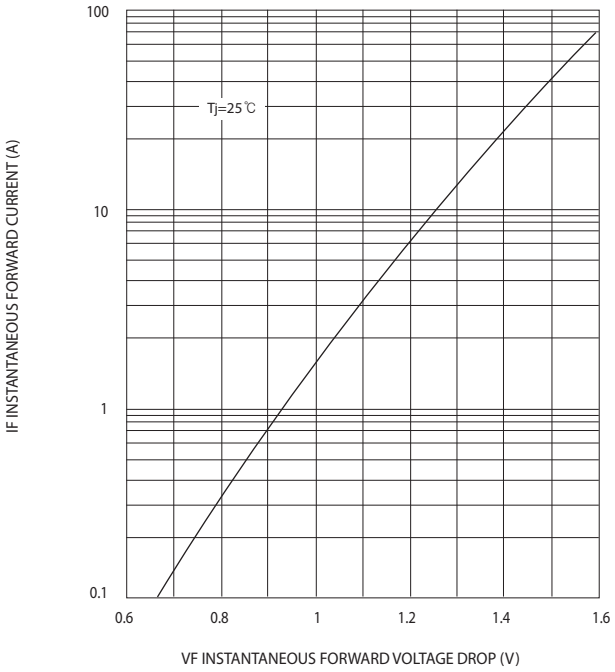


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

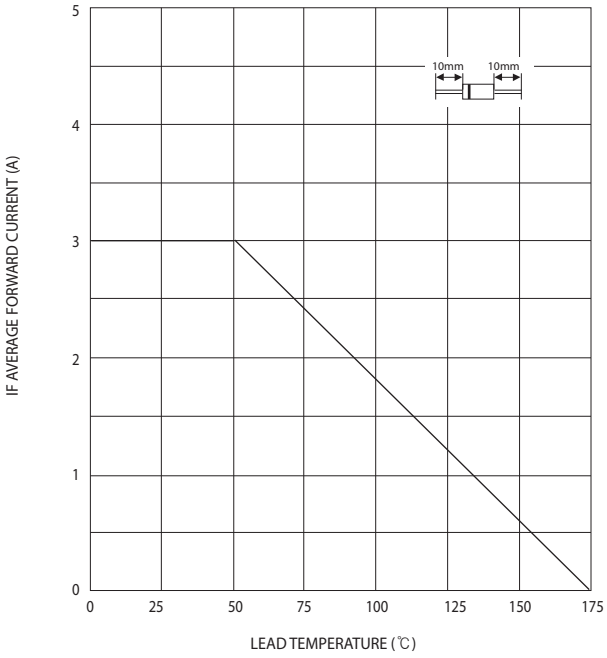


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

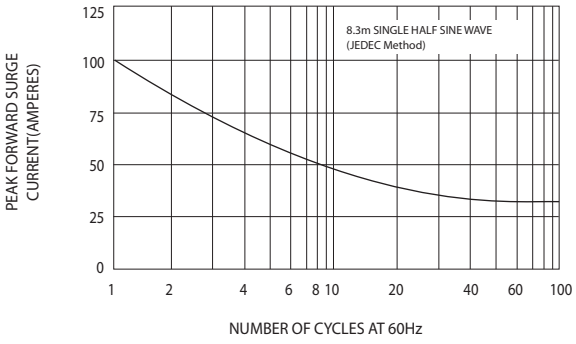


FIG.4-TYPICAL JUNCTION CAPACITANCE

