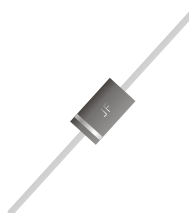


FEATURES

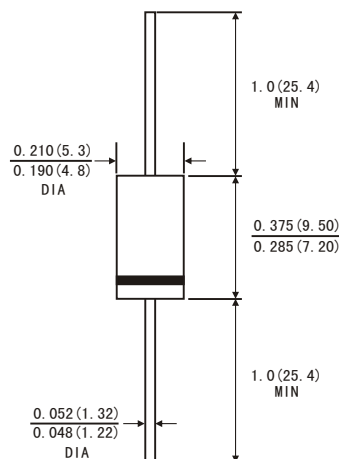
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Diffused junction
- High current capability
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- *Case:* JEDEC 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:* 0.041ounce, 1.18 grams



DO-201AD



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		Symbols	BY296	BY297	BY298	BY299	BY299S	Units
Maximum Recurrent Peak Reverse Voltage		VRRM	100	200	400	800	1000	Volts
Maximum RMS Voltage		VRMS	70	140	280	560	700	Volts
Maximum DC Blocking Voltage		VDC	100	200	400	800	1000	Volts
Maximum Average Forward Rectified Current R load at TA=55°C		I(AV)	2.0					Amps
Peak Forward Surge Current 10ms single half sine-wave superimposed on rated load at TA=25°C		IFSM	70.0					Amps
Maximum Instantaneous Forward Voltage at 2.0 A		VF	1.2					Volts
Maximum DC Reverse Current at rated DC blocking voltage	TA=25°C	IR	5.0					μA
	TA=100°C		100					
Maximum reverse recovery time(Note1)		trr	250					ns
Typical junction capacitance(Note2)		CJ	30					pF
Operating junction and storage temperature range		TJ TSTG	-65 to +150					°C

Note: 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 D.C.

RATINGS AND CHARACTERISTIC CURVES BY296 THRU BY299S

FIG.1-MAXIMUM FORWARD CURRENT DERATING CURVE

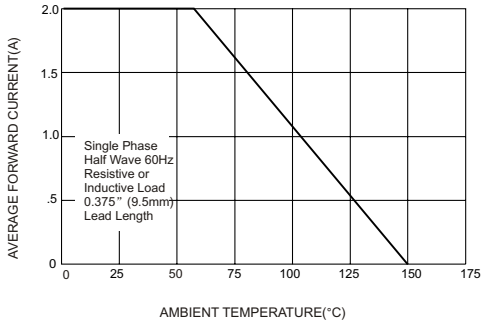


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

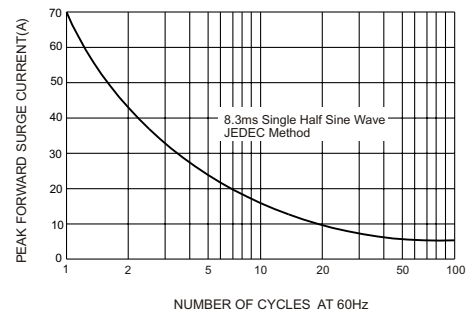


FIG.3-TYPICAL FORWARD CHARACTERISTICS

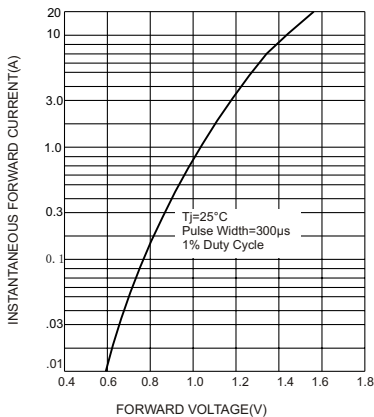


FIG.4-TYPICAL JUNCTION CAPACITANCE

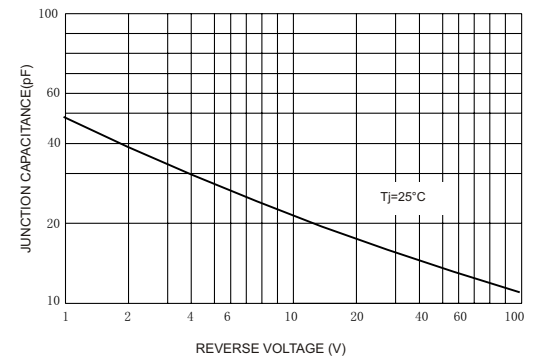
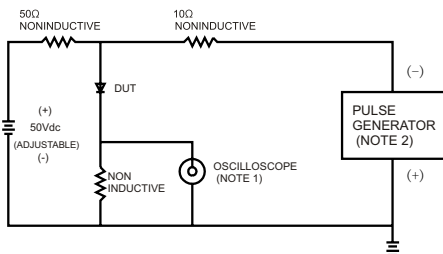


FIG.5-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTE: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pF
2. Rise Time=10ns max. Source Impedance= 50 ohms

