

FEATURES

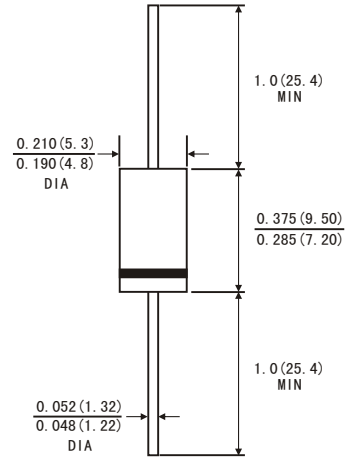
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Diffused junction
- High current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

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: 0.041 ounce, 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	V_{RRM}	100	200	400	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	70	140	280	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	100	200	400	800	1000	Volts
Maximum Average Forward Rectified Current R load at $T_A=55^\circ\text{C}$	$I_{(AV)}$	2.0					Amps
Peak Forward Surge Current 10ms single half sine-wave superimposed on rated load at $T_A=25^\circ\text{C}$	I_{FSM}	70.0					Amps
Maximum Instantaneous Forward Voltage at 2.0 A	V_F	1.2					Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	I_R	5.0				μA
	$T_A=100^\circ\text{C}$		100				
Maximum reverse recovery time(Note1)	t_{rr}	250					ns
Typical junction capacitance(Note2)	C_J	30					pF
Operating junction and storage temperature range	T_J T_{STG}	-65 to +150					°C

Note: 1. Test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$.

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

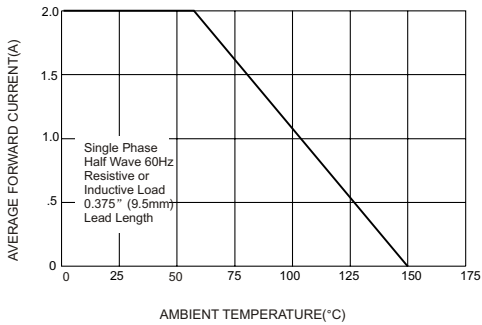


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

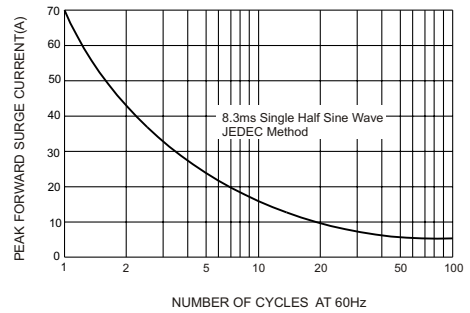


FIG.3-TYPICAL FORWARD CHARACTERISTICS

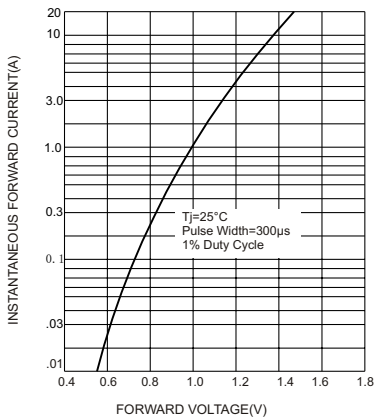


FIG.4-TYPICAL JUNCTION CAPACITANCE

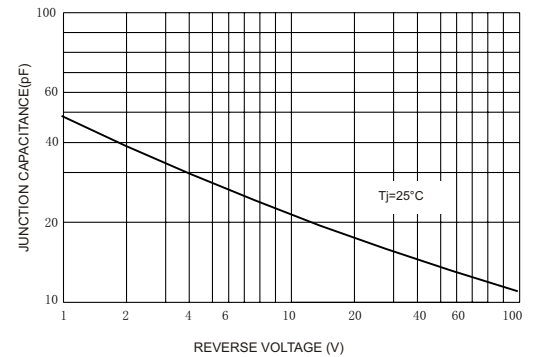
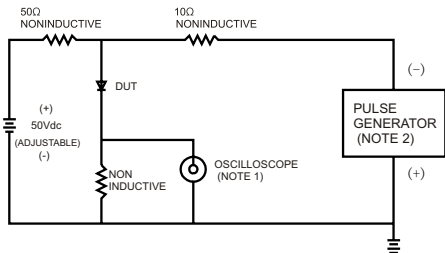


FIG.5-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



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

