

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ High switching for high efficiency
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
260°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension
- ◆ Glass passivated junction

Mechanical data

Case: JEDEC DO-201AD molded plastic body

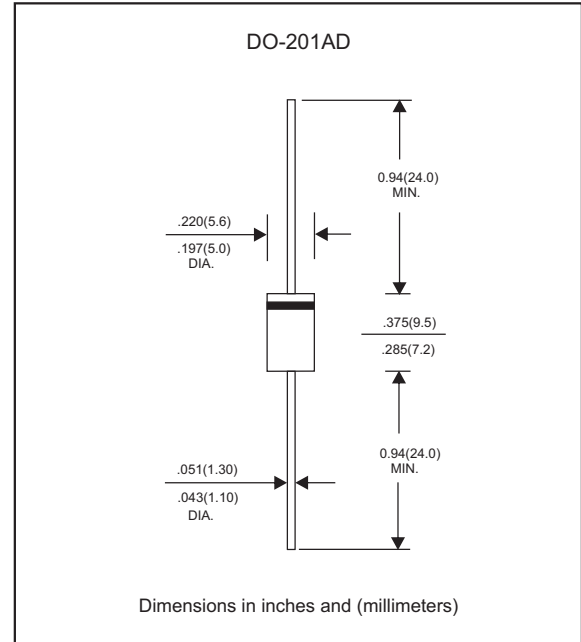
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.04 ounce, 1.10 grams

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

	SYMBOLS	HER 301G	HER 302G	HER 303G	HER 304G	HER 305G	HER 306G	HER 307G	HER 308G	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	300	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=50^\circ\text{C}$	$I_{(AV)}$	3.0								Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125.0								Amps
Maximum instantaneous forward voltage at 3.0A	V_F	1.0		1.3		1.85			Volts	
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	5.0 150.0								μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	50					75			ns
Typical junction capacitance (NOTE 2)	C_J	70.0					50			pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	20.0								$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150								$^\circ\text{C}$

Note: 1. Reverse recovery condition $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

Rating and characteristic curves

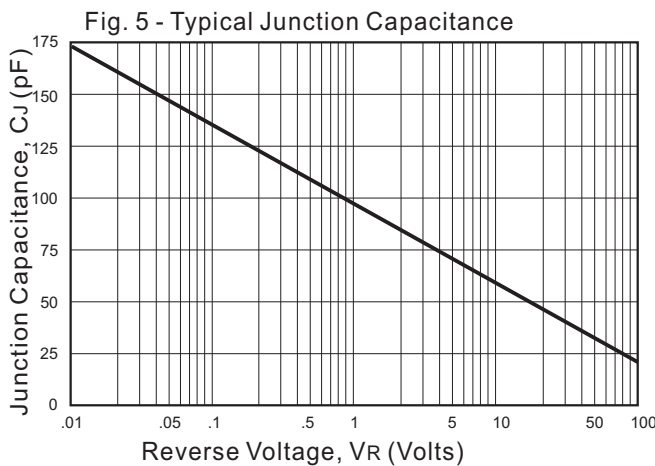
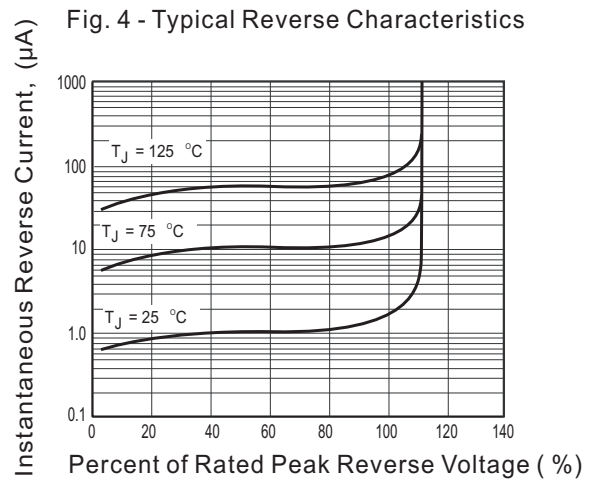
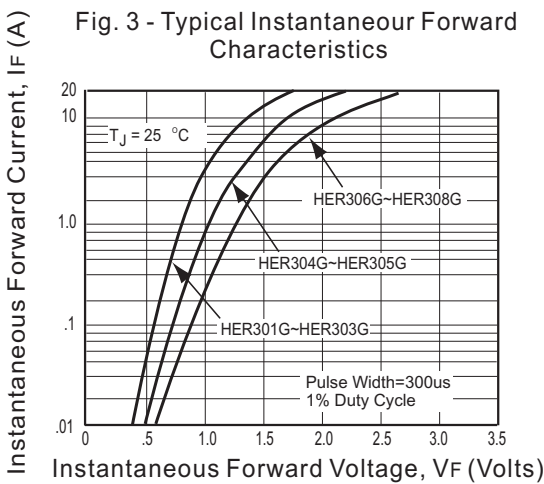
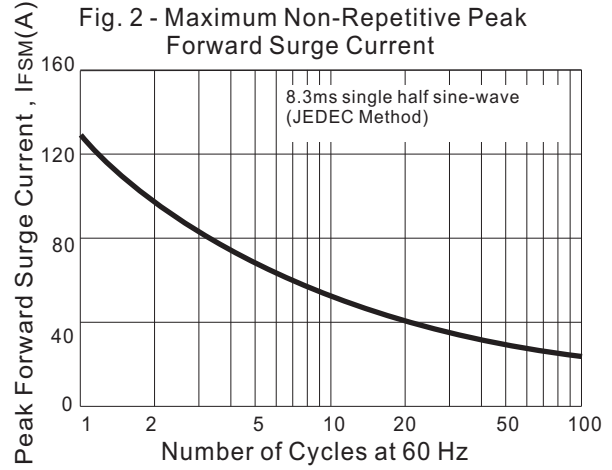
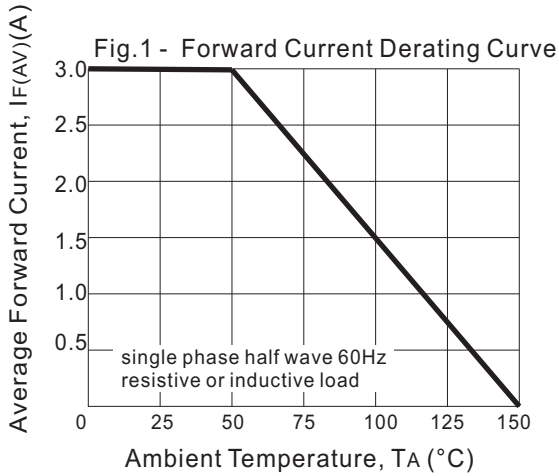
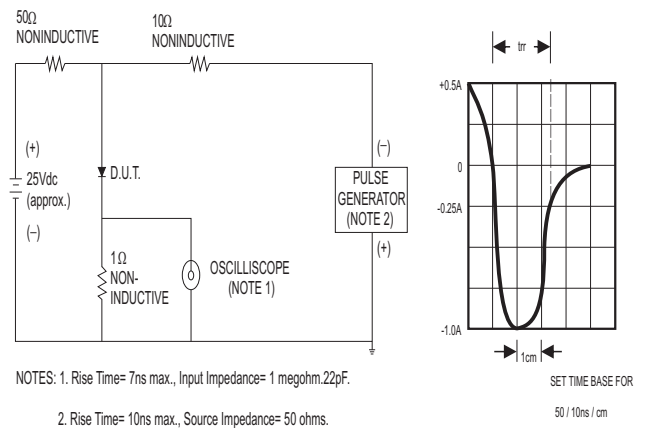


Fig. 6 - Test Circuit Diagram and Reverse Recovery Time Characteristic



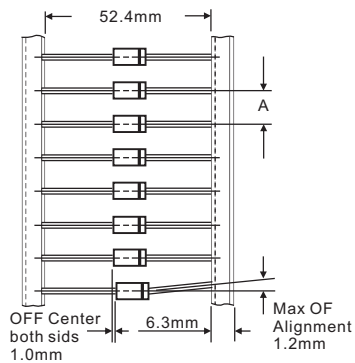
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code	Example	
HER301G HER302G HER303G HER304G HER305G HER306G HER307G HER308G	HER301G HER302G HER303G HER304G HER305G HER306G HER307G HER308G	<p>For Halogen Device</p>	<p>For Halogen-free Device</p>

Taping specifications for AXIAL devices



AMMO PACKING

DEVICE CASE TYPE	Q'TY 1 (PCS / BOX)	INNER BOX SIZE (m/m)	CARTON SIZE (m/m)	Q'TY 2 (PCS / CARTON)	APPROX. CROSS WEIGHT(kg)
DO-201AD	1,250	258 * 75 * 143	405 * 270 * 320	12,500	14.0

Suggested thermal profiles for soldering processes

1. Lead free temperature profile wave-soldering

