

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

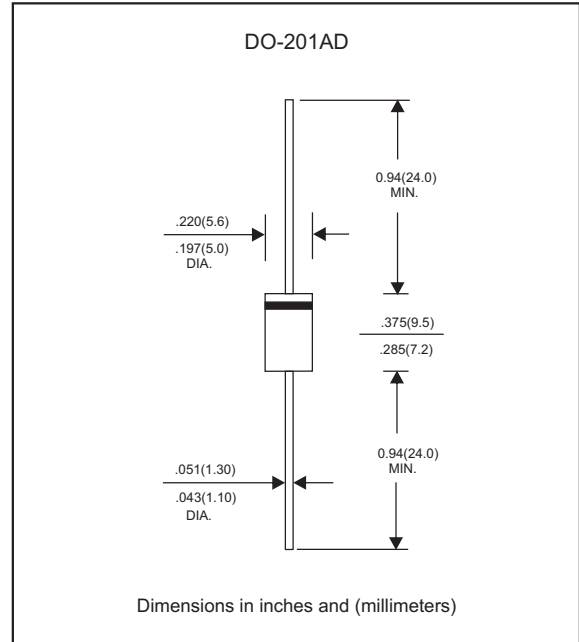
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

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°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°C at rated DC blocking voltage T _A =100°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 _{θJA}	20.0								°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150								°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

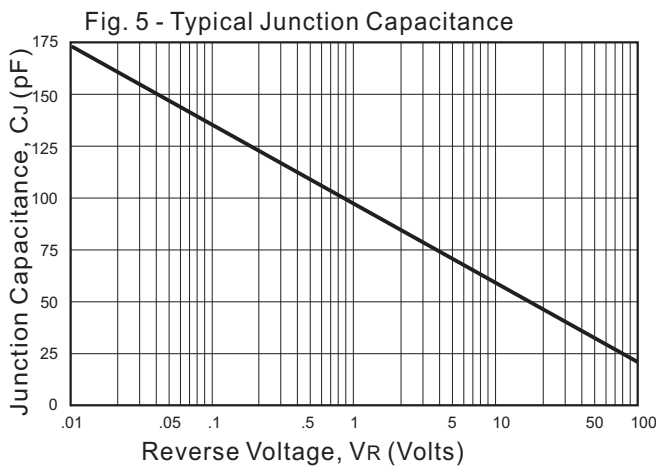
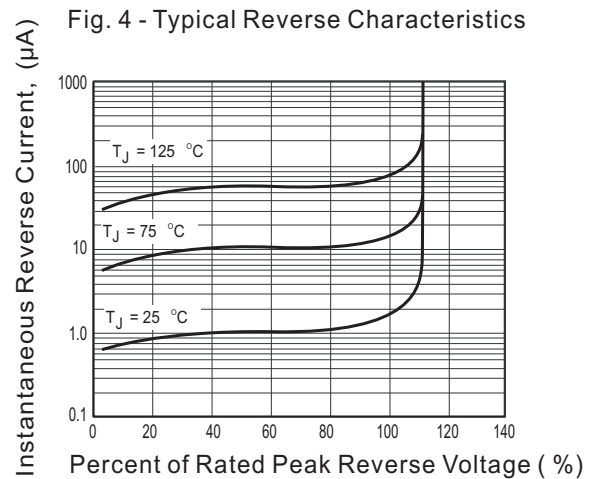
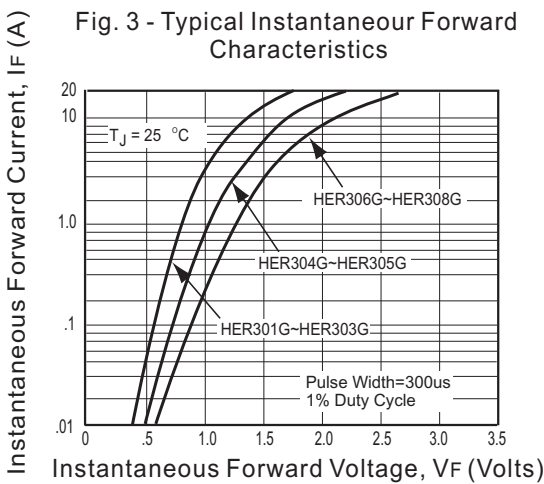
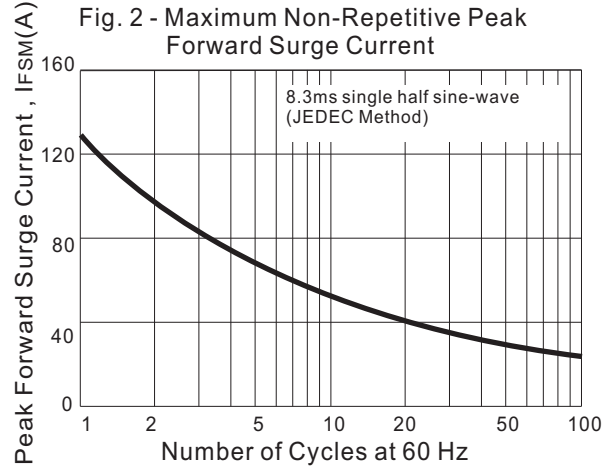
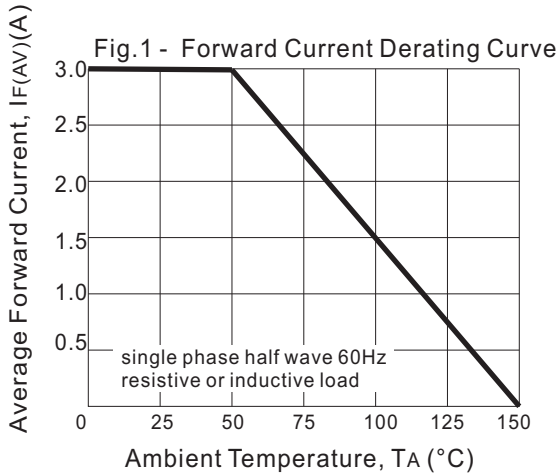
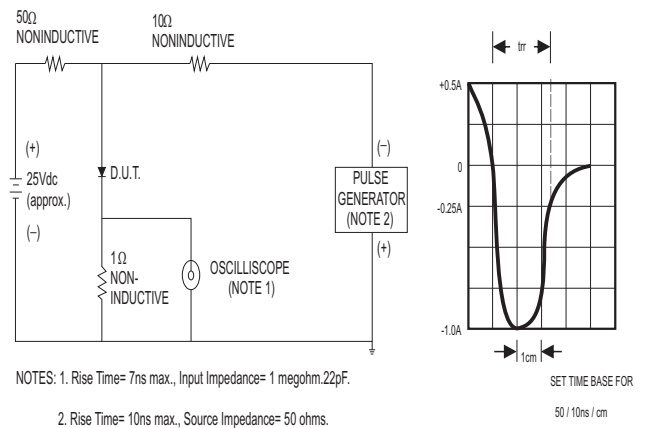


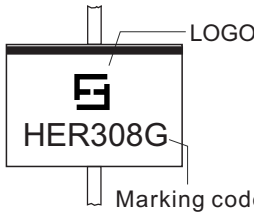
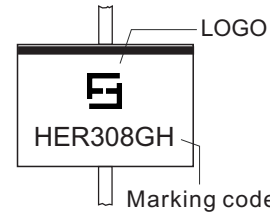
Fig. 6 - Test Circuit Diagram and Reverse Recovery Time Characteristic



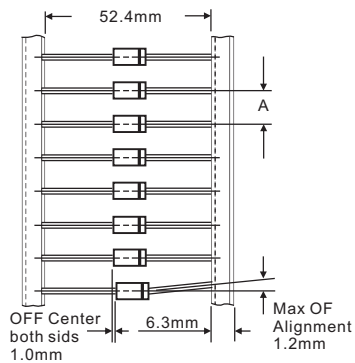
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode	1 ———— 2	1 ———— 2

Marking

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

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

