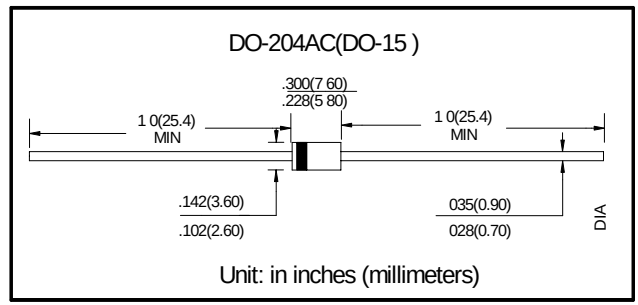
High Efficiency Rectifiers
Reverse Voltage 50V~1000 Volts, Forward Current 2.0 Ampers

Features

- Low Power Loss, High Efficiency
- Low leakage
- Low forward voltage drop
- High current capability
- High speed switching
- High reliability
- High current surge



Mechanical Data

- **Case:** Molded plastic
- **Epoxy:** UL94V-0 rate flame retardant
- **Lead:** MIL-STD-202E method 208C guaranteed
- **Mounting Position:** Any

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 current by 20%.

	Symbols	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	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℃	$I_{(AV)}$	**2.0**								Amps
Peak forward surge current, 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	I_{FSM}	**60**								Amps
Maximum instantaneous forward voltage at **2.0A DC**	V_F	1.0			1.3		1.7			Volts
Maximum full load reverse current average, full cycle 0.375" (9.5mm) lead length at T_L=55℃	$I_{R(AV)}$	150.0								uA
Maximum DC reverse current at rated DC blocking voltage T_A=25℃	I_R	**5**								uA
Maximum reverse recovery time (Note 1)	T_{rr}	50					75			nS
Operating and storage temperature range	T_J, T_{STG}	-65 to +150								℃

Notes:

(1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A

■ Characteristics(Typical)

FIG.1: FORWARD CURRENT DERATING CURVE

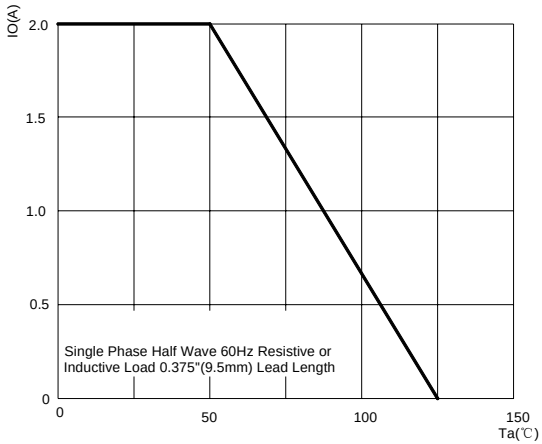


FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

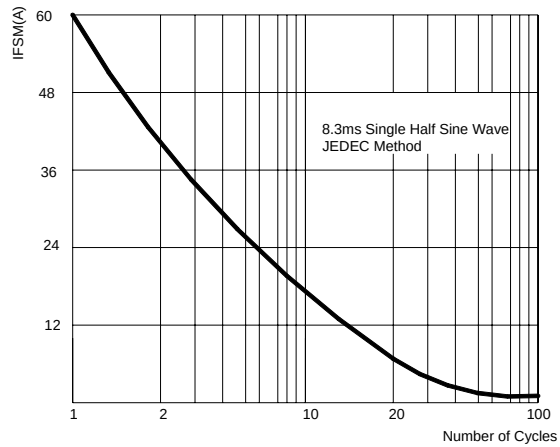


FIG.3: TYPICAL FORWARD CHARACTERISTICS

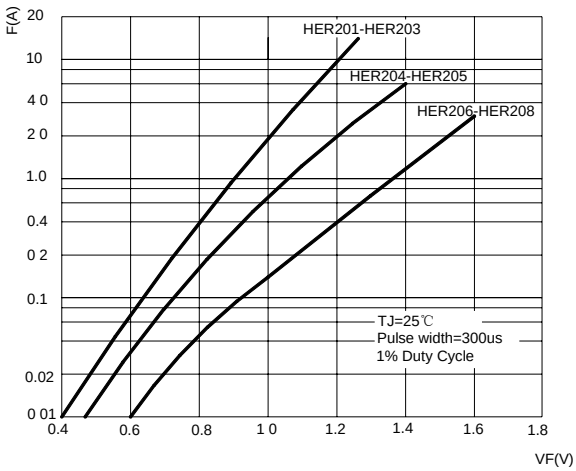


FIG.4: TYPICAL REVERSE CHARACTERISTICS

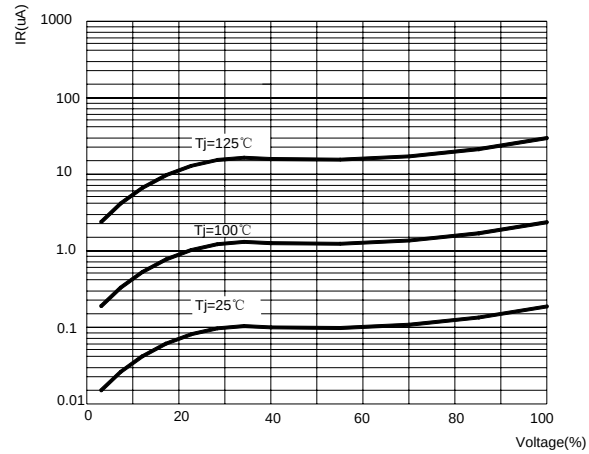


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time