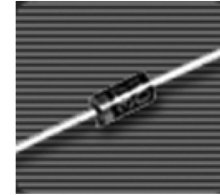


Features

- ◆ Glass passivated chip
- ◆ Ultra fast switching for high efficiency
- ◆ Low reverse leakage current
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ Easily cleaned with Freon, Alcohol, Chlorothene and similar solvents
- ◆ Plastic material has UL flammability classification 94V-0

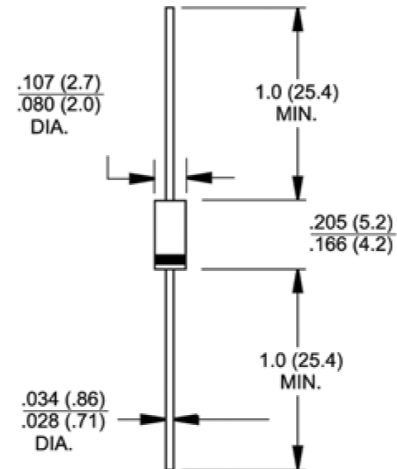
2018



DO-204AL (DO-41)

Mechanical Data

- ◆ Case : JEDEC DO-204AL(DO-41) molded plastic
- ◆ Polarity : Color band denotes cathode
- ◆ Weight : 0.012 ounce, 0.335 gram
- ◆ Mounting position : Any



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbols	HER 1001G	HER 1002G	HER 1003G	HER 1004G	HER 1005G	HER 1006G	HER 1007G	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _A =55°C	I _{F(AV)}	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0A (Note 2)	V _F	1.0			1.3	1.7			Volts
Maximum DC reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	5.0 100							uA
Maximum reverse recovery time I _F =0.5A, I _R =1.0A, I _{tr} = 0.25A	t _{tr}	50				75			nS
Typical junction capacitance at 4.0V, 1MHz	C _J	17							pF
Typical thermal resistance (Note 1)	R _{θJA} R _{θJL}	60 15							°C/W
Operating junction temperature range	T _J	-55 to +150							°C
Storage temperature range	T _{STG}	-55 to +150							°C

Notes: 1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length
2. Pulse test: 300 μs pulse width, 1% duty cycle

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

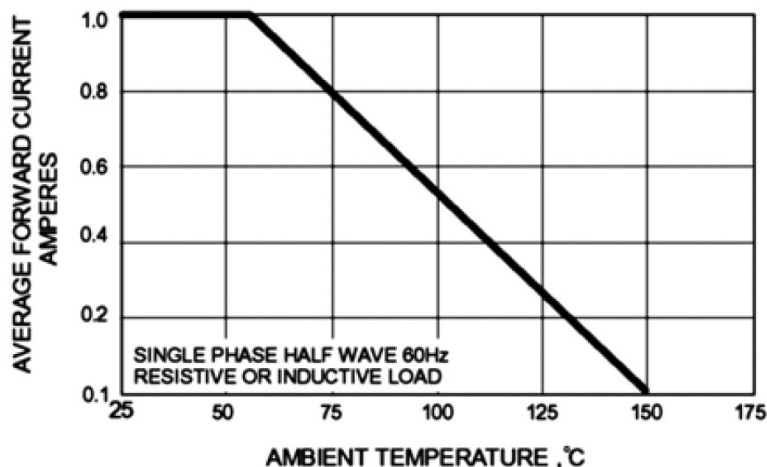


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

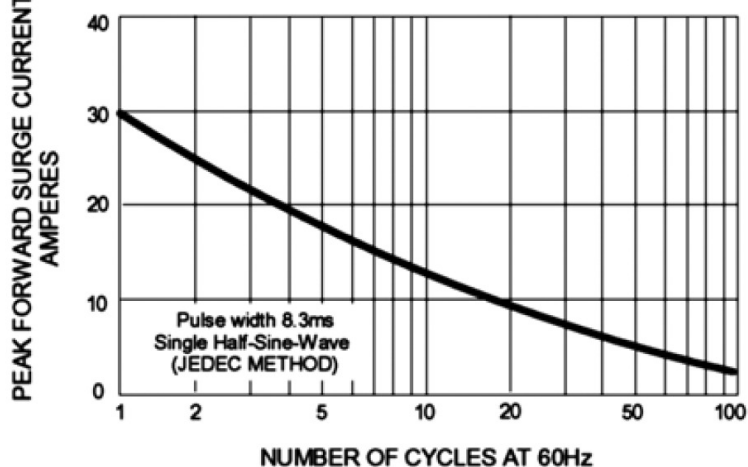


FIG.3 - TYPICAL JUNCTION CAPACITANCE

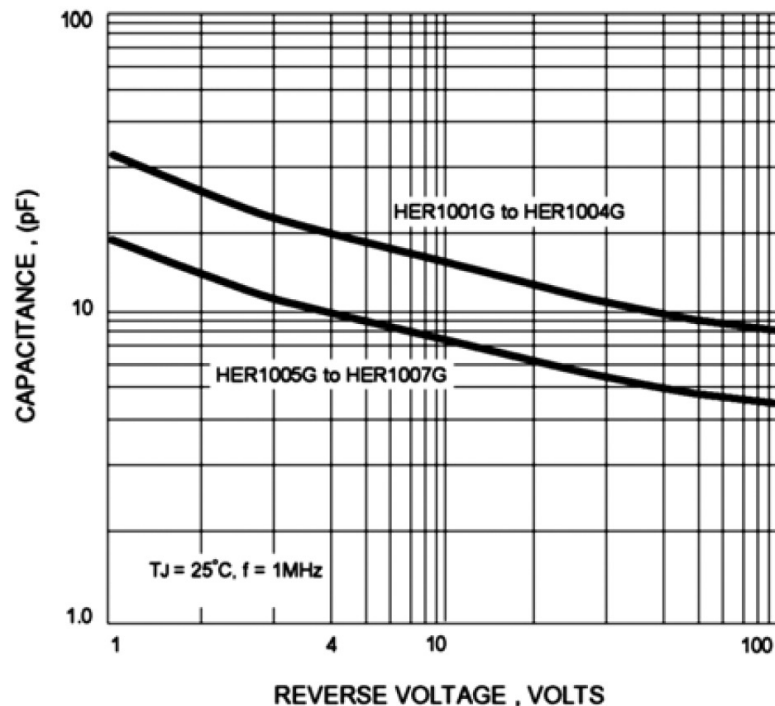


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

