



## 2.0A High Efficient Rectifier

### Features

1. High surge current capability
2. High reliability
3. Low forward voltage drop
4. High current capability



### Absolute Maximum Ratings

$T_j=25^{\circ}\text{C}$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Repetitive peak reverse voltage = Working peak reverse voltage = DC blocking voltage		HER201	$V_{RRM}$	50	V
		HER202	$=V_{RWM}$	100	V
		HER203	$=V_R$	200	V
		HER204		300	V
		HER205		400	V
		HER206		600	V
		HER207		800	V
		HER208		1000	V
Peak forward surge current			$I_{FSM}$	60	A
Average forward current	$T_A=50^{\circ}\text{C}$		$I_{FAV}$	2.0	A
Storage temperature range			$T_{stg}$	-65~+175	$^{\circ}\text{C}$

### Electrical Characteristics

$T_j=25^{\circ}\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=2.0\text{A}$	HER201-HER204	$V_F$			1.0	V
		HER205	$V_F$			1.3	V
		HER206-HER208	$V_F$			1.85	V
Reverse current	$T_A=25^{\circ}\text{C}$		$I_R$			5	$\mu\text{A}$
	$T_A=100^{\circ}\text{C}$		$I_R$			150	$\mu\text{A}$
Maximum reverse recovery time	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	HER201~HER205	$T_{rr}$			50	ns
		HER206~HER208	$T_{rr}$			70	ns
Diode capacitance	$V_R=4\text{V}, f=1\text{MHz}$		$C_D$		30		pF

**Excel Semiconductor**



Characteristics ( $T_j=25^\circ\text{C}$  unless otherwise specified)

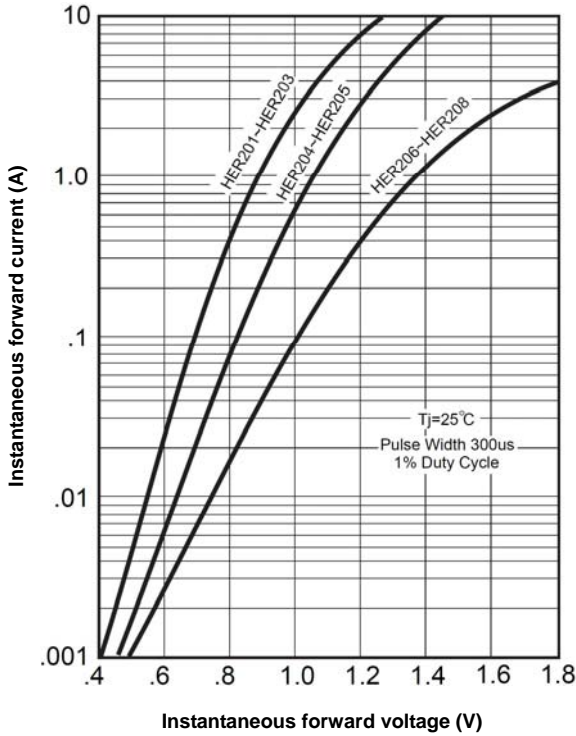


Figure 1. Typical forward characteristics

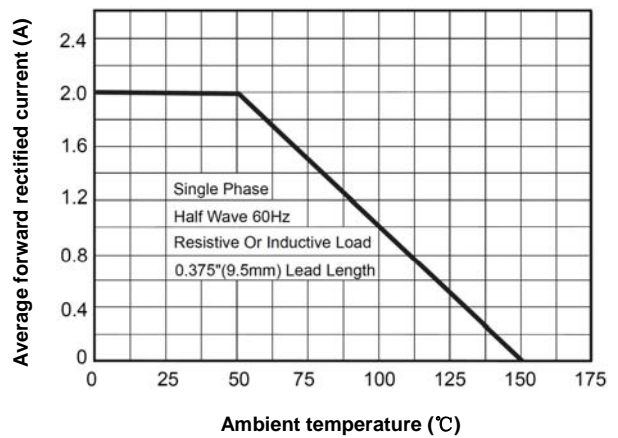


Figure 2. Forward derating curve

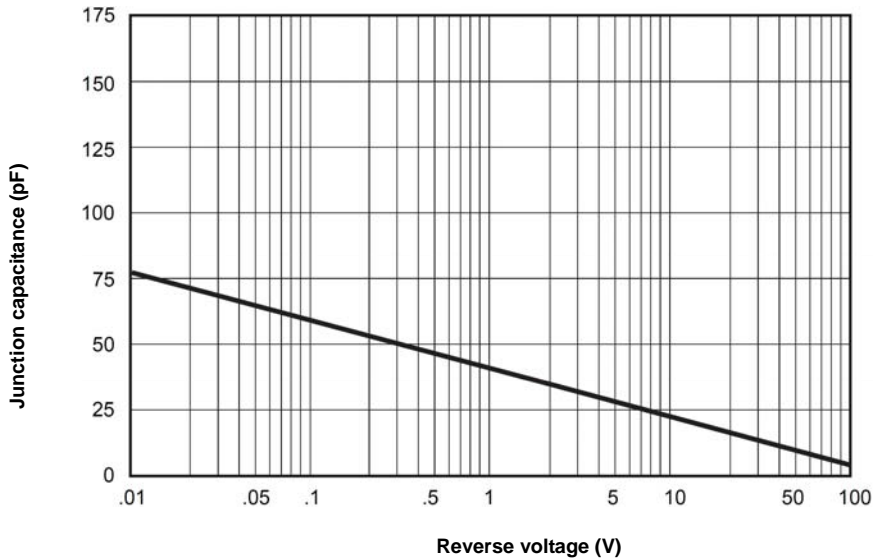
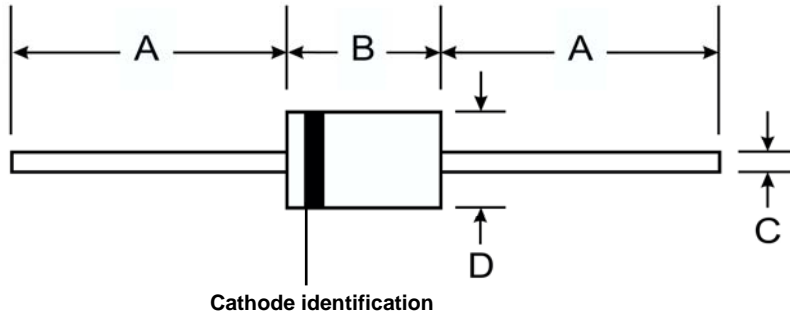


Figure 3. Junction capacitance



**Dimensions in mm**



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	1.000	---	25.40	---
B	0.230	0.300	5.80	7.60
C	0.026	0.034	0.70	0.90
D	0.104	0.140	2.60	3.60

Case: molded plastic DO-15

Polarity: cathode band

Marking: type number

**Marking**

