



1.5A 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		HER151	V_{RRM}	50	V
		HER152	$=V_{RWM}$	100	V
		HER153	$=V_R$	200	V
		HER154		300	V
		HER155		400	V
		HER156		600	V
		HER157		800	V
		HER158		1000	V
Peak forward surge current			I_{FSM}	50	A
Average forward current	$T_A=55^{\circ}\text{C}$		I_{FAV}	1.5	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	$I_F=1.5\text{A}$	HER151-HER154	V_F			1.0	V
		HER155	V_F			1.3	V
		HER156-HER158	V_F			1.85	V
Reverse current	$T_A=25^{\circ}\text{C}$		I_R			5	μA
	$T_A=100^{\circ}\text{C}$		I_R			100	μA
Maximum reverse recovery time	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	HER151~HER155	T_{rr}			50	ns
		HER156~HER158	T_{rr}			70	ns
Diode capacitance	$V_R=4\text{V}, f=1\text{MHz}$		C_D		30		pF

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

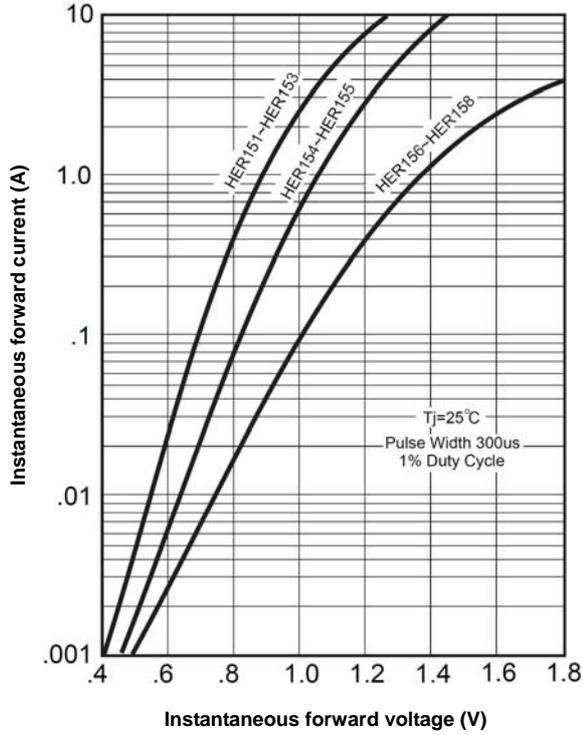


Figure 1. Typical forward characteristics

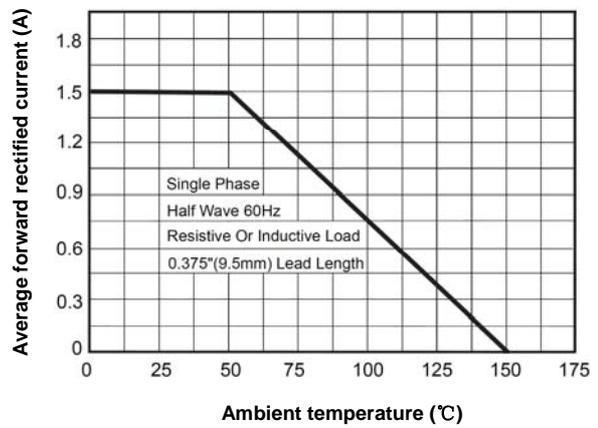


Figure 2. Forward derating curve

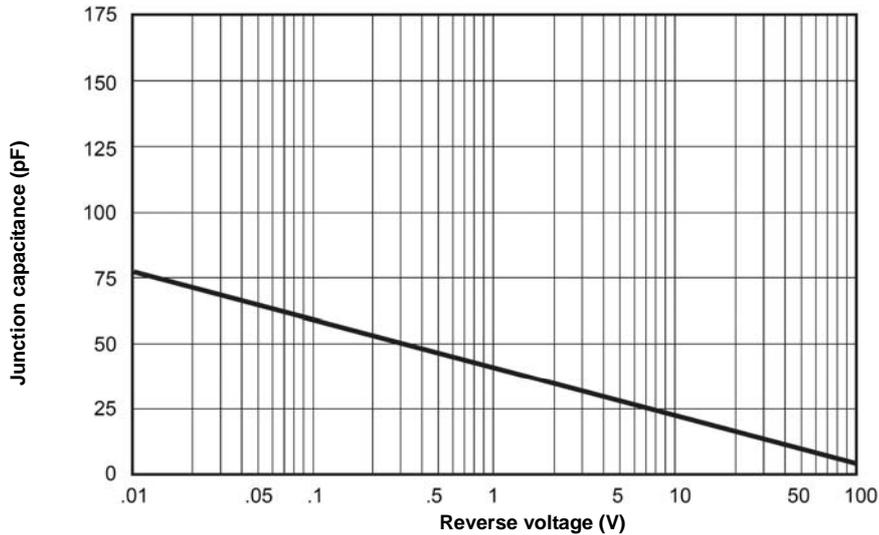
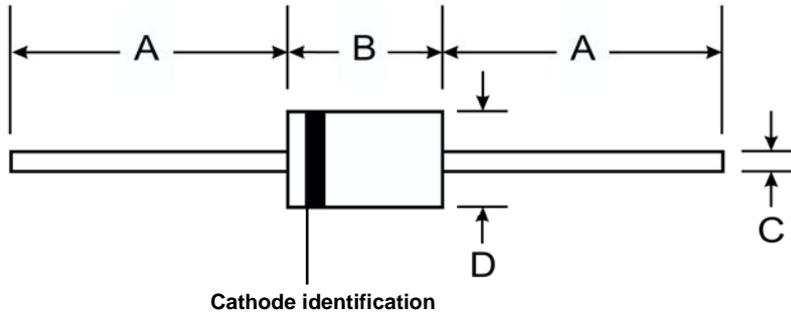


Figure 3. Junction capacitance

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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

