1.0A 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℃

Parameter	Test Conditions	Type	Symbol	Value	Unit
Repetitive peak reverse voltage = Working peak reverse voltage = DC blocking voltage		HER101	V_{RRM} =V_{RWM} =V_R	50	V
		HER102		100	V
		HER103		200	V
		HER104		300	V
		HER105		400	V
		HER106		600	V
		HER107		800	V
		HER108		1000	V
Peak forward surge current			I_{FSM}	30	A
Average forward current	T_A=55℃		I_{FAV}	1.0	A
Storage temperature range			T_{stg}	-65~+175	℃

Electrical Characteristics

T_j=25℃

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F=1.0A	HER101-HER104	V_F			1.0	V
		HER105	V_F			1.3	V
		HER106-HER108	V_F			1.85	V
Reverse current	T_A=25℃		I_R			5	μA
	T_A=100℃		I_R			100	μA
Maximum reverse recovery time	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A	HER101~HER105	T_{rr}			50	ns
		HER106~HER108	T_{rr}			70	ns
Diode capacitance	V_R=4V, f=1MHz		C_D		20		pF

Characteristics (T_j=25℃ unless otherwise specified)

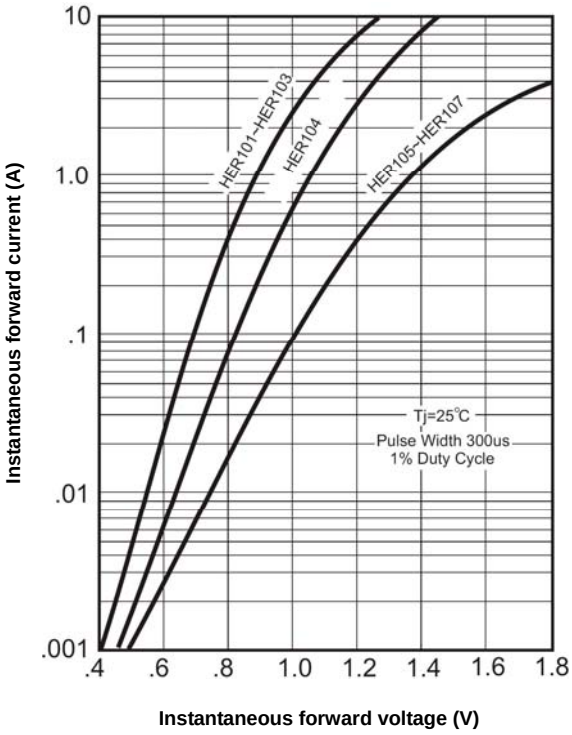


Figure 1. Typical forward characteristics

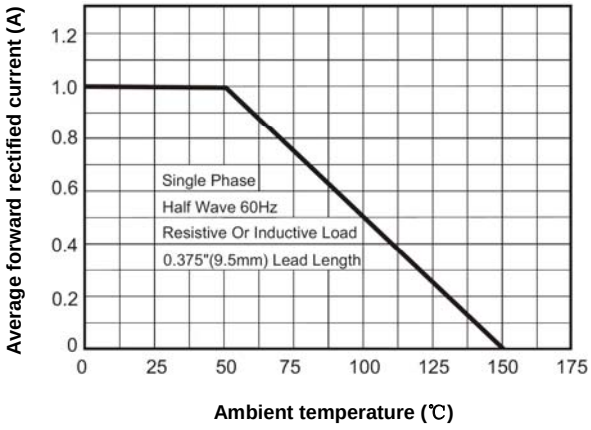


Figure 2. Forward derating curve

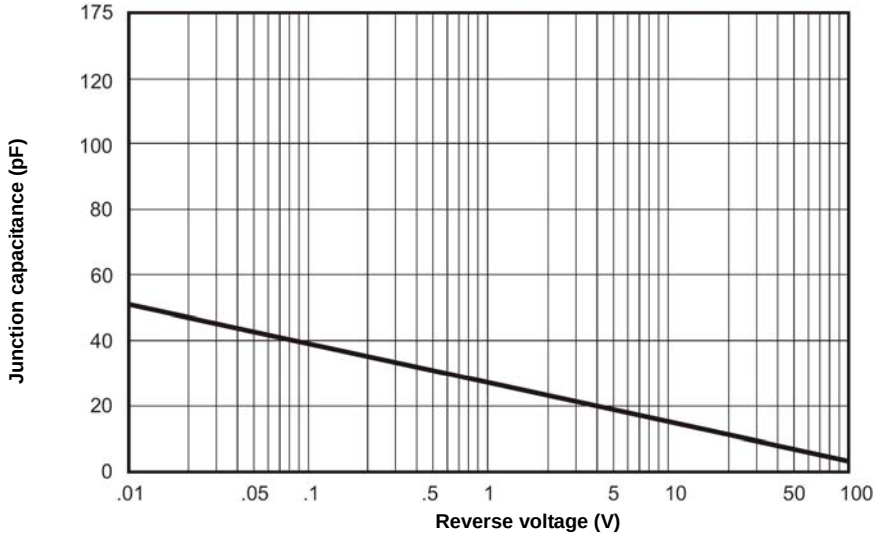
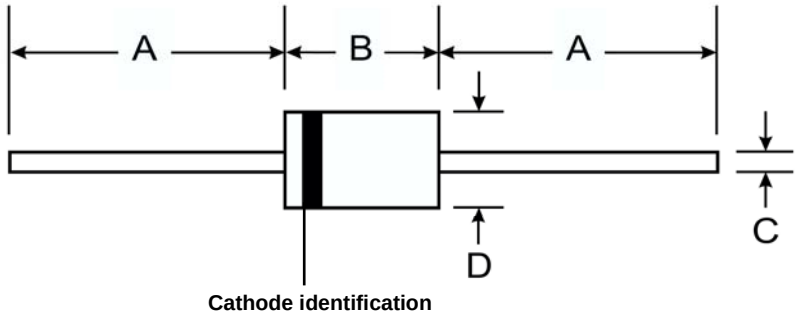


Figure 3. Junction capacitance

Dimensions in mm



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	1.000	---	25.40	---
B	0.166	0.205	4.10	5.20
C	0.028	0.034	0.70	0.90
D	0.080	0.107	2.00	2.70

Case: molded plastic DO-41
Polarity: cathode band
Marking: type number

Marking