

Features

- Low leakage current
- Low forward voltage drop
- Glass passivated chip junction
- For general purpose applications
- Moisture sensitivity: level 1, per J-STD-020
- For fast switching and low logic level applications
- High temperature soldering guaranteed: 260°C/10 seconds



P600

Applications

Small battery charger, power supplies

Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	HER 601	HER 602	HER 603	HER 604	HER 605	HER 606	HER 607	HER 608	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current	I _{F(AV)}	6								A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load per Diode	I _{FSM}	200								A
Typical Thermal Resistance, Junction to Ambient	R _{θJA}	63								°C/W
Typical Thermal Resistance, Junction to Case	R _{θJC}	30								°C/W
Typical Thermal Resistance, Junction to Lead	R _{θJL}	24								°C/W
Operating Junction Temperature Range	T _J	-55 to +135								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Conditions	HER 601	HER 602	HER 603	HER 604	HER 605	HER 606	HER 607	HER 608	Unit
Forward Drop Voltage	V _F	I _F =6A	1.0			1.3		1.7			V
Reverse Leakage Current @ V _R	I _R	T _J =25°C	10								uA
		T _J =125°C	200								
Typical Junction Capacitance	C _J	4.0V, 1MHz	100					65			pF
Maximum Reverse Recovery Time	t _{rr}	I _F =0.5A, I _R =1.0A, I _{RR} =0.25A	50					75			nS

HER601 thru HER608

Ultrafast Recovery Rectifiers
 Reverse Voltage 50V to 1000V Forward Current 6.0A

Ratings and Characteristics Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

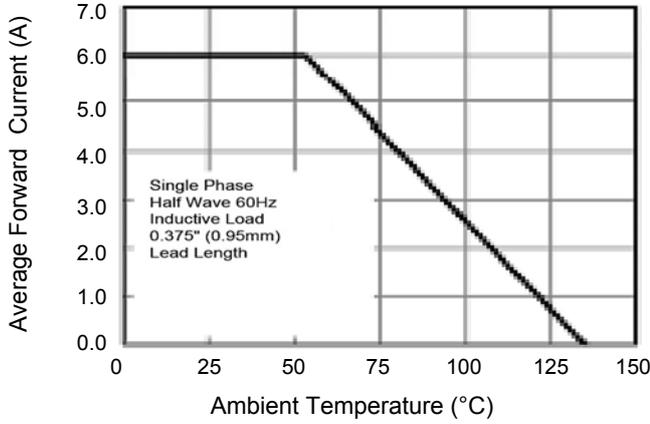


Figure 1. Maximum Forward Current Derating Curve

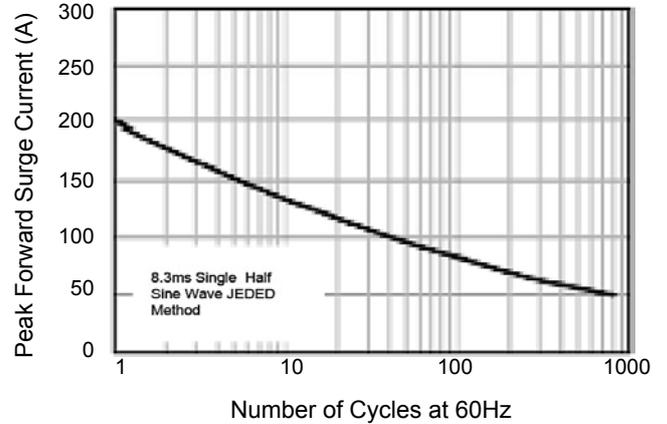


Figure 2. Maximum Non-Repetitive Forward Surge Current

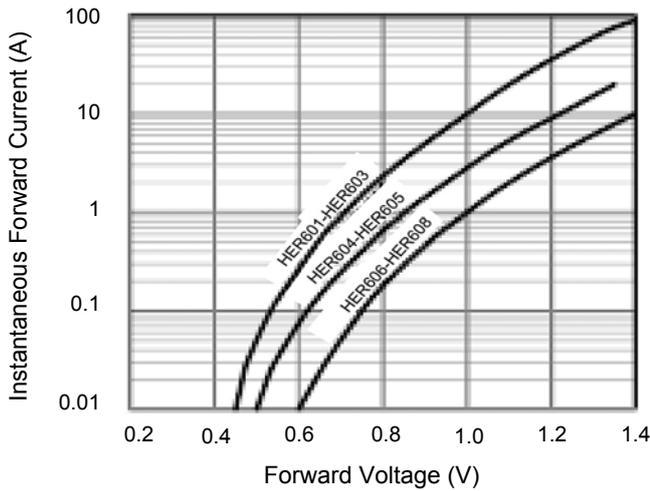


Figure 3. Typical Forward Characteristics

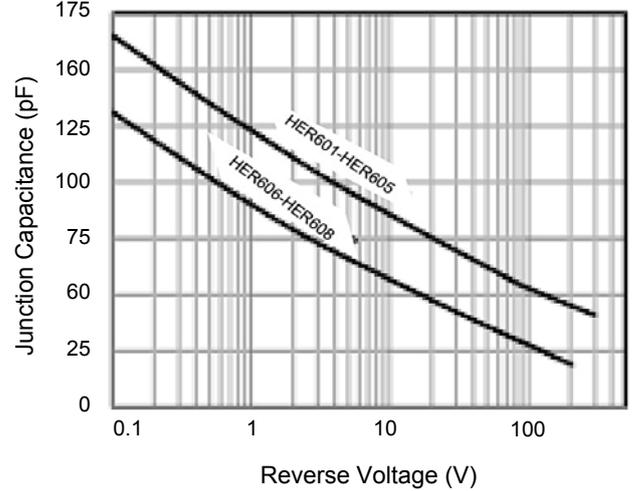


Figure 4. Typical Junction Capacitance

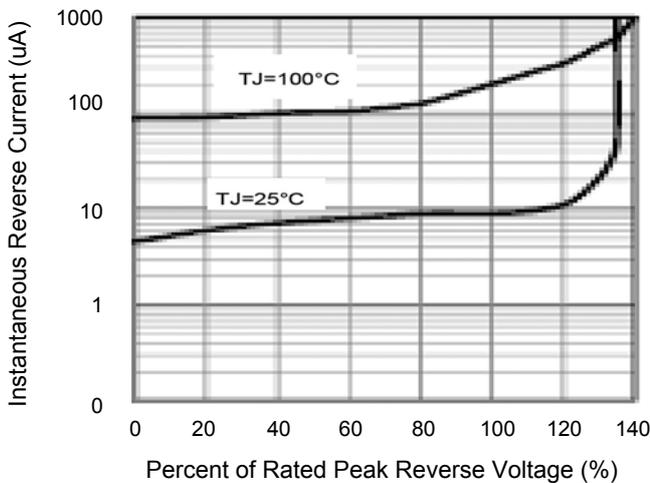
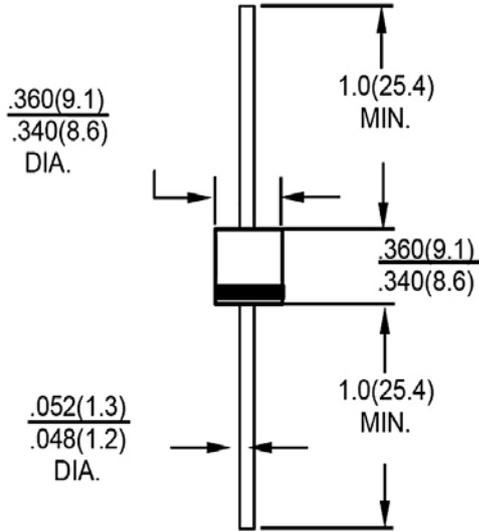


Figure 5. Typical Reverse Characteristics

HER601 thru HER608

Ultrafast Recovery Rectifiers
 Reverse Voltage 50V to 1000V Forward Current 6.0A

Package Outline Dimensions (P600)



Order Information

Device	Package	Marking	Carrier	Quantity
HER601	P600	HER601	Box	250 Pcs / Box
HER602	P600	HER602	Box	250 Pcs / Box
HER603	P600	HER603	Box	250 Pcs / Box
HER604	P600	HER604	Box	250 Pcs / Box
HER605	P600	HER605	Box	250 Pcs / Box
HER606	P600	HER606	Box	250 Pcs / Box
HER607	P600	HER607	Box	250 Pcs / Box
HER608	P600	HER608	Box	250 Pcs / Box

For more information, please contact us at: inquiry@goodarksemi.com