

GS85HF-10 thru GS85HF-160

General Purpose Rectifiers

Reverse Voltage 100V to 1600V Forward Current 85A

Features

- High surge current capability
- Stud cathode and stud anode version
- Designed and qualified for industrial and consumer level
- Minimum lot-to-lot variations for robust device performance and reliable operation



DO-5

Applications

- Battery charges
- Converters
- Power supplies
- Machine tool controls

Absolute Maximum Ratings and Electrical Characteristics

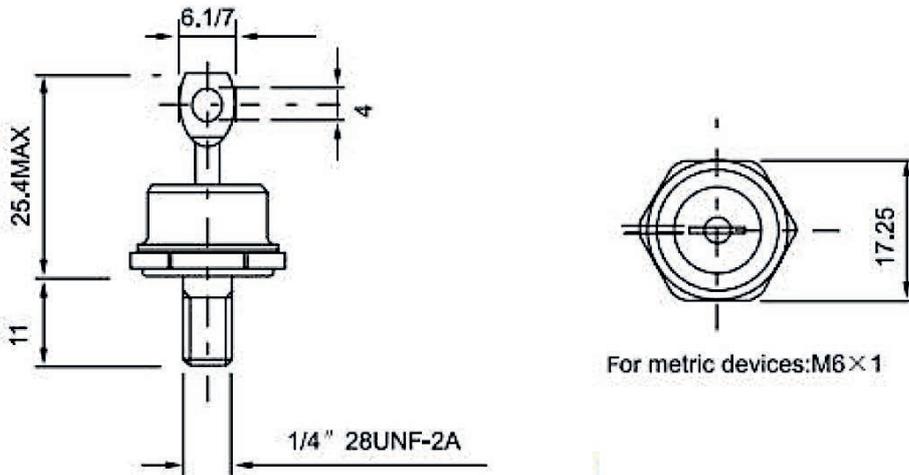
Parameter	Symbol	Conditions	Value		Unit
			10-120	140-160	
Repetitive Peak Reverse Voltage	V_{RRM}	-	100-1200	1400-1600	V
Maximum Reverse Recovery Current	I_{RRM}	$T_J = \text{Maximum } T_J$	9	4.5	mA
Average Forward Current	$I_{F(AV)}$	$T_C = 140^\circ\text{C}$, 180° conduction, half sine wave	85		A
		$T_C = 110^\circ\text{C}$, 180° conduction, half sine wave	85		
Surge Forward Current	I_{FSM}	t=10ms	No voltage reappplied	1700	A
		t=8.3ms		1800	
		t=10ms	100% V_{RRM} reappplied	1450	
		t=8.3ms		1500	
I^2t for Fusing	I^2t	t=10ms	No voltage reappplied	14500	A ² s
		t=8.3ms		13500	
		t=10ms	100% V_{RRM} reappplied	10500	
		t=8.3ms		9400	
Max. Forward Voltage Drop	V_F	$I_F = 220\text{A}$, $T_J = 25^\circ\text{C}$, $t_p = 400\mu\text{s}$	1.2	1.4	V
Max. Thermal Resistance, Junction to Case	R_{THJ-C}	-	0.35		°C/W
Junction Temperature	T_J	-	-65 to +180	-65 to +150	°C
Storage Temperature	T_{STG}	-	-65 to +180	-65 to +150	°C

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Package Outline Dimensions (DO-5)



Note:

1. Unit: mm
2. Polarity: stud normal polarity (cathode to stud)

Order Information

Device	Package	Marking	Carrier	Quantity
GS85HF-10	DO-5	85HF10	Box	10pcs / Box
GS85HF-20	DO-5	85HF20	Box	10pcs / Box
GS85HF-40	DO-5	85HF40	Box	10pcs / Box
GS85HF-60	DO-5	85HF60	Box	10pcs / Box
GS85HF-80	DO-5	85HF80	Box	10pcs / Box
GS85HF-100	DO-5	85HF100	Box	10pcs / Box
GS85HF-120	DO-5	85HF120	Box	10pcs / Box
GS85HF-140	DO-5	85HF140	Box	10pcs / Box
GS85HF-160	DO-5	85HF160	Box	10pcs / Box

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