

## HD860 ULTRAFAST PLASTIC RECTIFIER

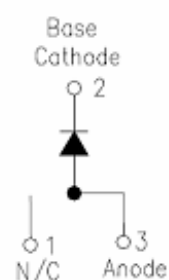
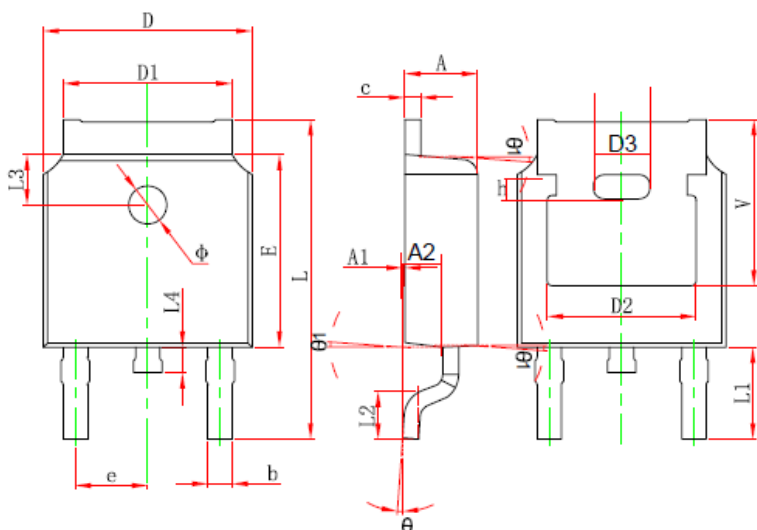
**Features:**

- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request


**Mechanical Data:**

- Case: Molded Plastic
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208
- Weight: 0.39 grams (approx.)
- Marking: Type Number
- Mounting Position: Any

HD860


**Mechanical Dimensions: In mm /Inches**


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.380	0.087	0.094
A10.000	0.000	0.100	0.000	0.004
b	0.710	0.810	0.028	0.032
c	0.460	0.560	0.018	0.022
D	6.500	6.700	0.256	0.264
D1	5.130	5.460	0.202	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.800	10.400	0.386	0.409
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	1.600 REF.		0.063 REF.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
A2	0.910	1.110	0.036	0.044
V	5.350 REF.		0.211 REF.	
D3	1.778 REF.		0.070 REF.	
h	0.762 REF.		0.030 REF.	
θ1	7°		7°	

**DPAK**
**MARKING, MOLDING RESIN**

Marking for HD860, 1<sup>st</sup> row HL, 2<sup>nd</sup> row AH0 LXX, 3<sup>rd</sup> row HD860  
 Where XX is Determined by customer

**Ordering Information:**

Device	Package	Shipping
HD860	DDPAK (Pb-Free)	2500pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

**Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$  unless otherwise specified**

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	HD860	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	420	V
Average Rectified Output Current @ $T_A = 100^{\circ}\text{C}$	$I_o$	8.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	110	A
Forward Voltage (per element) @ $I_F = 8.0\text{A}$ , $T_J = 25^{\circ}\text{C}$	$V_{FM}$	1.7	V
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$	$I_{RM}$	5.0 50	$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	50	ns
Max. Voltage Rate of Change	$dv/dt$	10,000	V/ $\mu\text{s}$
Typical Thermal Resistance Junction to Ambient (Note 2)	$R_{\theta JA}$	25	K/W
Storage Temperature Range	$T_{STG}$ , $T_J$	-55 to +150	$^{\circ}\text{C}$
Case Style	DDPAK		

- Note:**
1. Reverse Recovery Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$
  2. Mount on Cu-Pad Size 16mm×16mm on P.C.B.

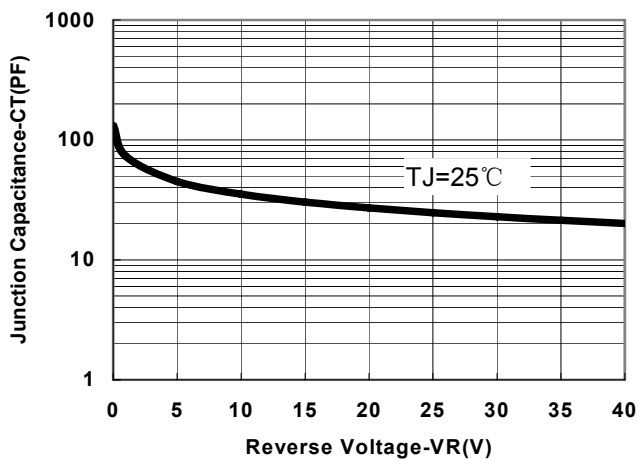


Fig.1-Typical Junction Capacitance

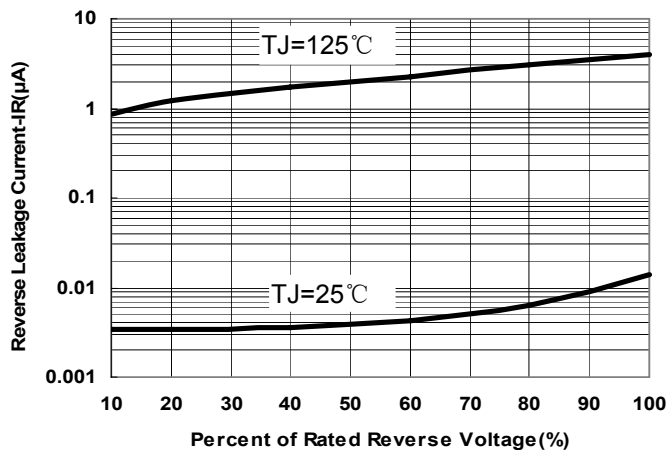


Fig.2-Typical Reverse Characteristics

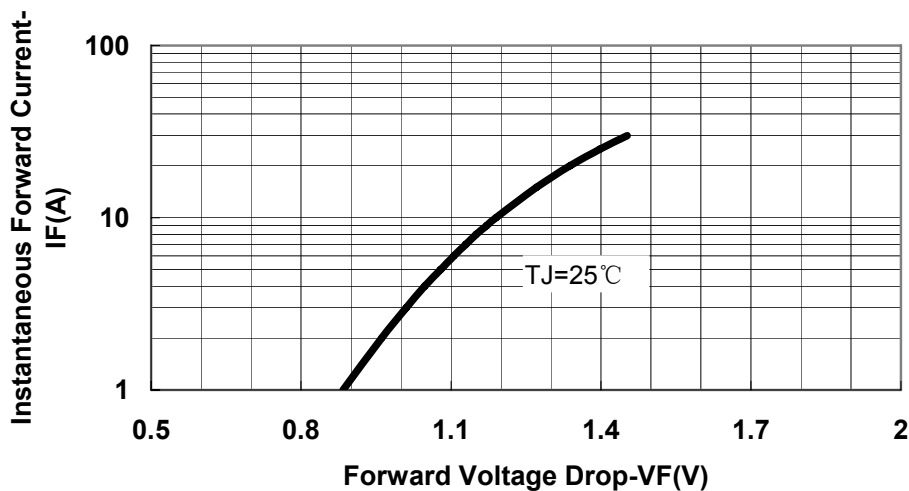


Fig.3-Typical Forward Voltage Drop Characteristics

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