



SENSITRON

SEMICONDUCTOR

CSHD6-60C

TECHNICAL DATA
DATA SHEET

CSHD6-60C SCHOTTKY RECTIFIER

Applications:

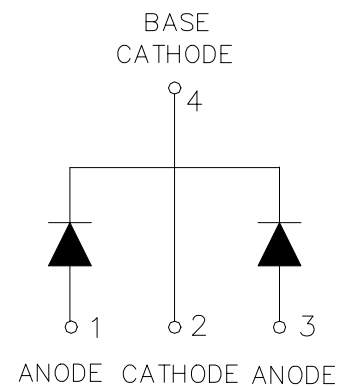
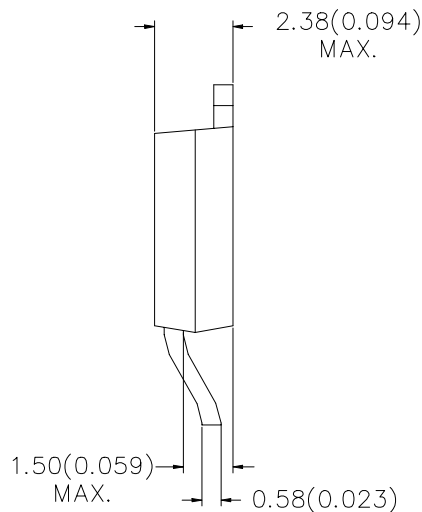
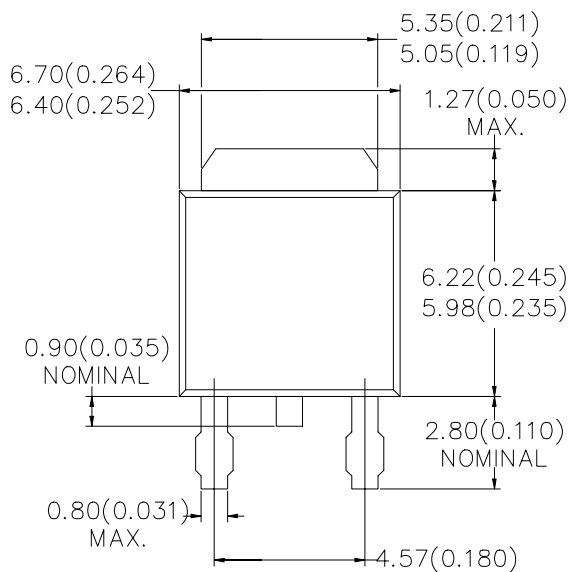
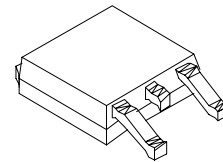
- Switching power supply • Converters • Free-Wheeling diodes • Reverse battery protection
- Battery charging

Features:

- Popular D-PAK outline
- Small foot print, surface mountable
- Low forward voltage drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability

Mechanical Dimensions: In Inches / mm

D-PAK



**Maximum Ratings:**

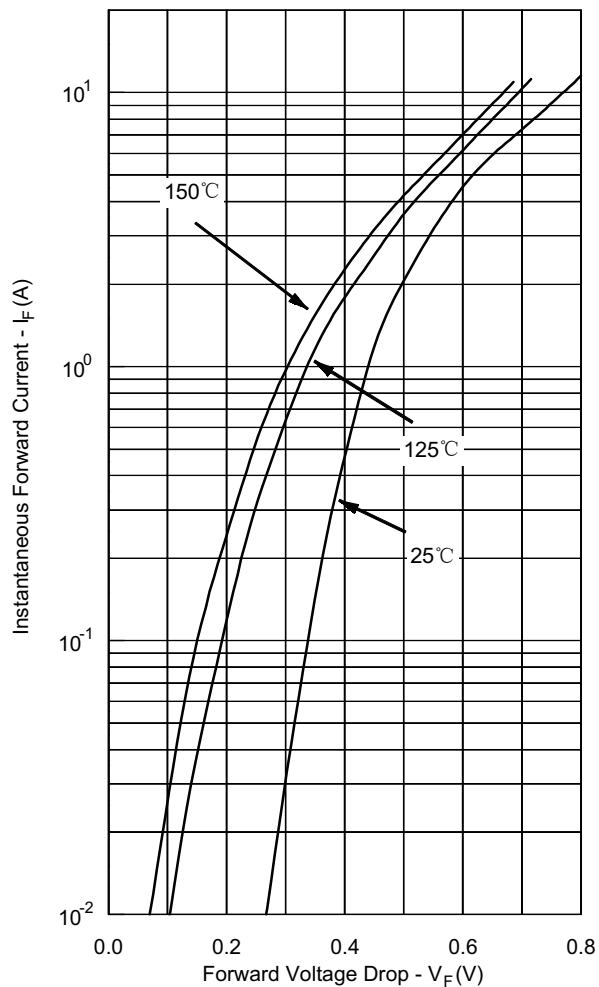
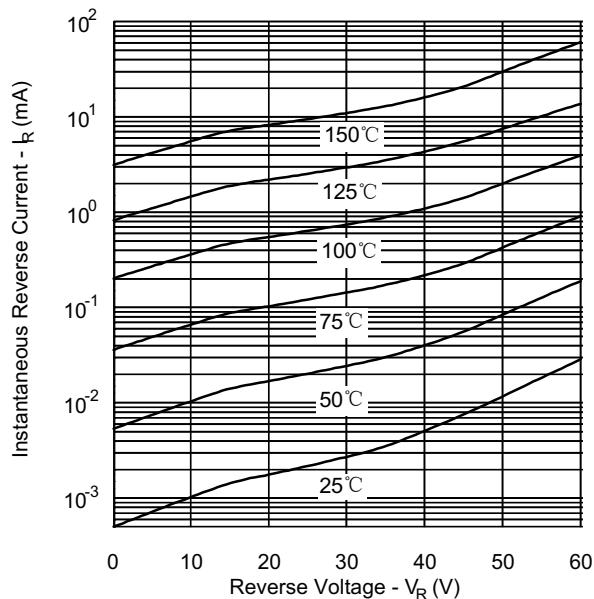
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	60	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_C = 120^\circ\text{C}$, rectangular wave form	6.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	60	A
Peak Repetitive Reverse Surge Current	I_{RRM}		1.0	A

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop (per leg)*	V_{F1}	@ 3 A, Pulse, $T_J = 25^\circ\text{C}$	0.65	V
		@ 6 A, Pulse, $T_J = 25^\circ\text{C}$	0.90	
	V_{F2}	@ 3 A, Pulse, $T_J = 125^\circ\text{C}$	0.59	V
		@ 6 A, Pulse, $T_J = 125^\circ\text{C}$	0.85	
Max. Reverse Current (per leg)*	I_{R1}	@ $V_R = \text{Rated } V_R$, Pulse, $T_J = 25^\circ\text{C}$	0.03	mA
	I_{R2}	@ $V_R = \text{Rated } V_R$, Pulse, $T_J = 125^\circ\text{C}$	10	mA
Max. Voltage Rate of Change	dv/dt	-	10,000	V/ μs

* Pulse Width < 300 μs , Duty Cycle < 2%**Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-65 to +150	$^\circ\text{C}$
Max. Storage Temperature	T_{stg}	-	-65 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	3.5	$^\circ\text{C/W}$
Approximate Weight	wt	-	0.3	g
Case Style	D – PAK (Similar to TO-252AA)			

**Typical Forward Characteristics****Typical Reverse Characteristics****Typical Junction Capacitance**