

**UPS840
 PRELIMINARY**

**SURFACE MOUNT
 8A SCHOTTKY RECTIFIER
 POWERMITE® 3 Power Surface Mount Package**

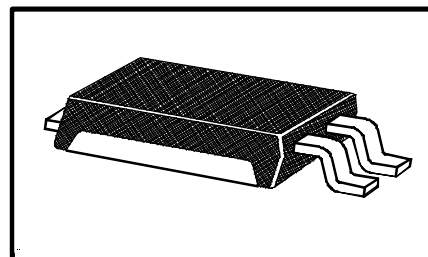
Features:

- Low Profile -- Maximum Height of 1.1 mm
- Footprint Area of 16.51 mm²
- Low V_F Provides Higher Efficiency
- Supplied in 16 mm Tape and Reel -- 6,000 Units per Reel
- Low Thermal Resistance with Direct Thermal Path of Die on Exposed Cathode Heat Sink

Mechanical Characteristics:

- Case: Molded Epoxy
- Epoxy Meets UL94, VO at 1/8"
- Weight: 72 mg (approximately)
- Device Marking: S840
- Lead and Mounting Surface Temperature for Soldering Purposes, 260°C Maximum for 10 Seconds

**SCHOTTKY BARRIER
 RECTIFIER
 8 AMPERES
 40 VOLTS**



Maximum Ratings

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	40	V
Average Rectified Forward Current (At Rated V _R , T _C = 100°C)	I _O	8	A
Non-Repetitive Peak Surge Current (Non-Repetitive peak surge current with 8A I _O)	I _{FSM}	150	A
Storage Temperature	T _{stg} , T _C	-55 to 150	°C
Operating Temperature	T _J	-55 to 125	°C
Voltage Rate of Change (Rated V _R , T _J = 25°C)	dv/dt	1000	V/μs

Thermal Characteristics

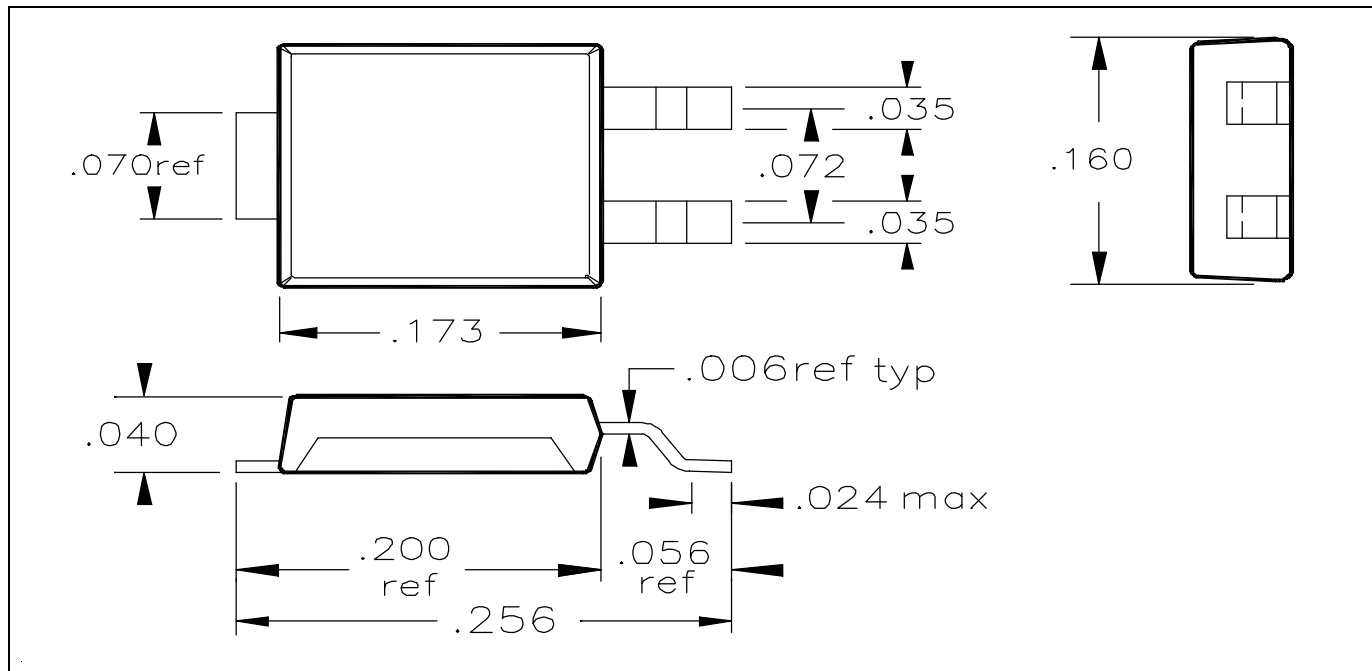
Thermal Resistance - Junction-to-Case	R _{tjtab}	2.5	°C/W
Thermal Resistance - Junction-to-Ambient	R _{tja}	130	

Electrical Characteristics

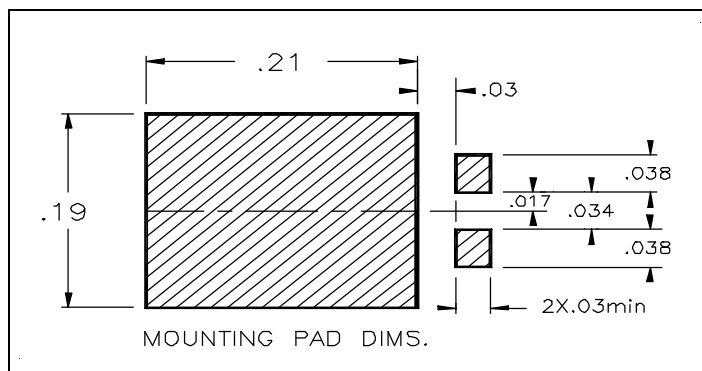
Maximum Instantaneous Forward Voltage (1) (I _F = 3 A) (I _F = 8 A) (I _F = 10 A)	V _F	T _J = 25°C 0.37 0.45 0.49	V
Maximum Instantaneous Reverse Current (V _R = 40 V)	I _R	T _J = 25°C 5	mA

(1) Pulse Test: Pulse Width ≤ 400 μs, Duty Cycle ≤ 2%.

MECHANICAL DIMENSIONS
POWERMITE-3



CASE OUTLINE



FOOTPRINT