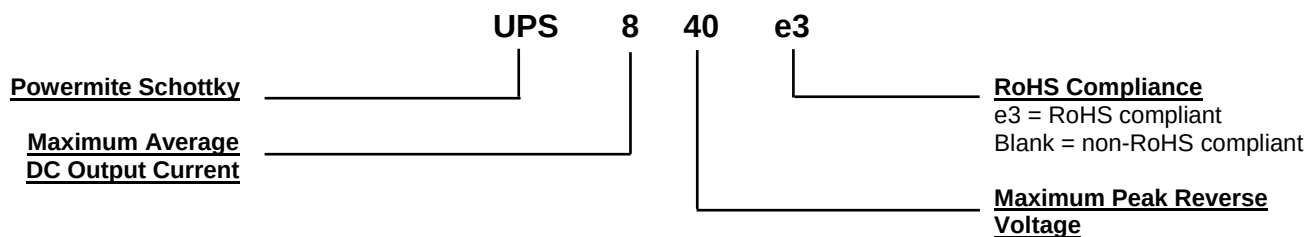


MECHANICAL and PACKAGING

- CASE: Molded epoxy package meets UL94V-0
- TERMINALS: Copper with annealed matte-tin plating for RoHS compliance. Solderable per MIL-STD-750 method 2026. (Consult factory for tin-lead plating).
- MARKING: Body marked with "S840•" (dot indicates RoHS compliance)
- POLARITY: Two-leads on side are internally connected together for anode and bottom side is the cathode.
- TAPE & REEL option: Packaging per EIA-481-2 with 16 mm tape. Consult factory for quantities.
- WEIGHT: Approximately 0.072 grams
- See [Package Dimensions](#) on last page.

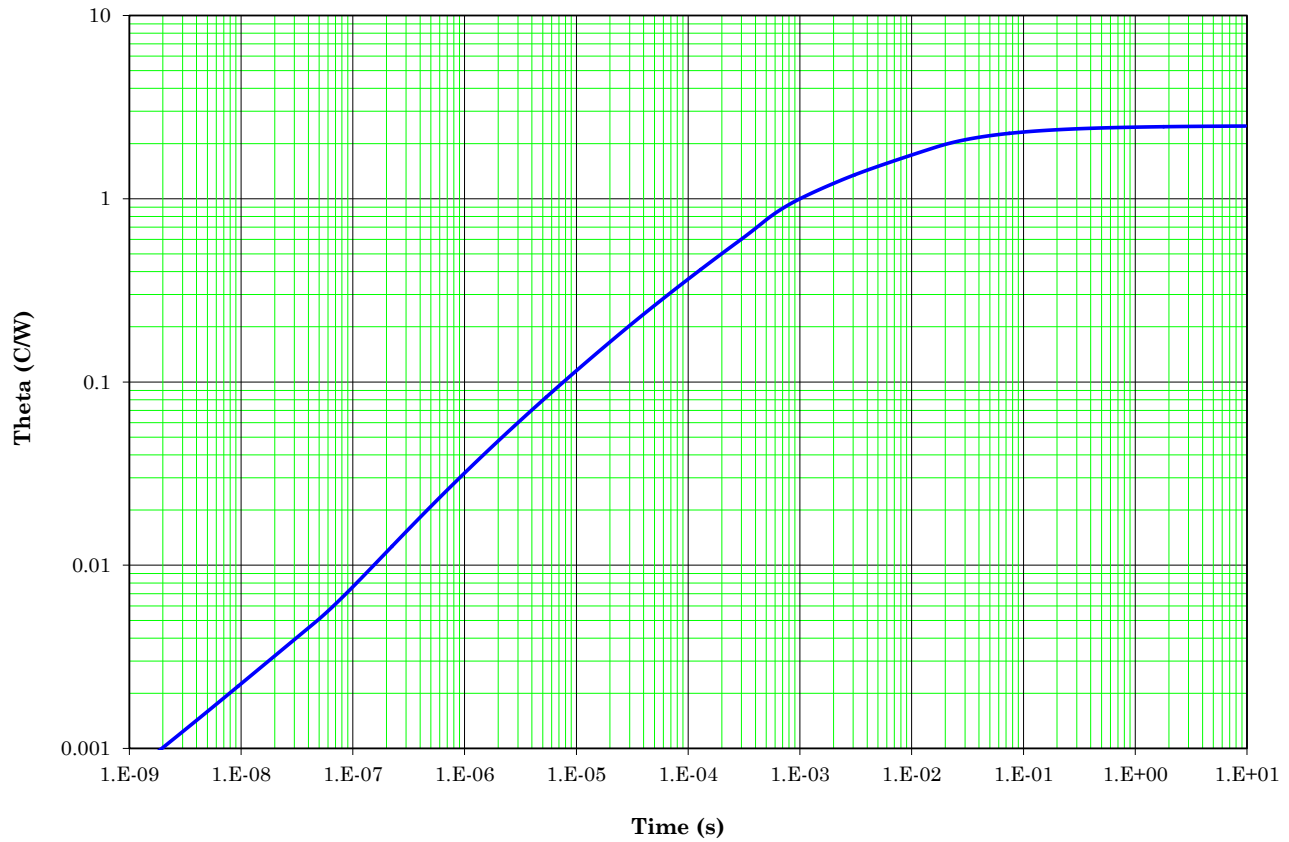
PART NOMENCLATURE

SYMBOLS & DEFINITIONS

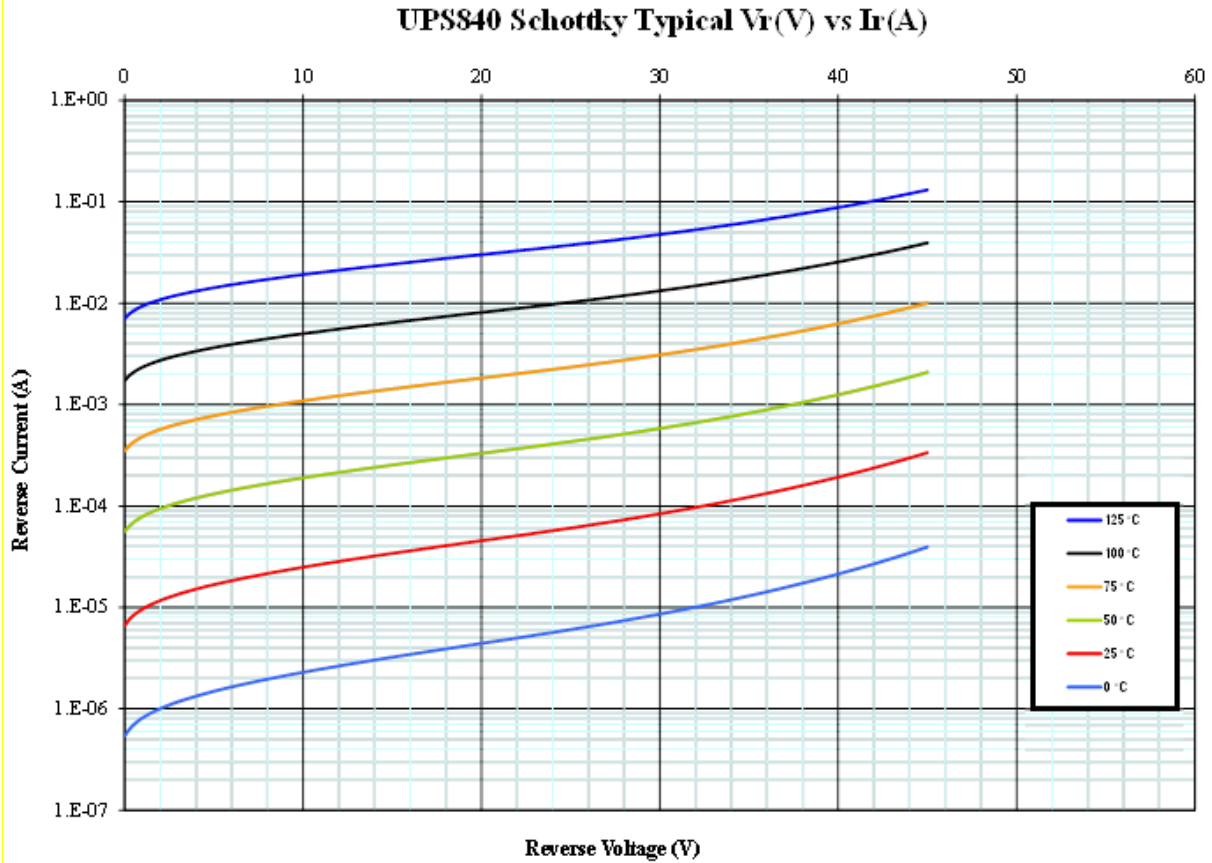
Symbol	Definition
C_T	Total Capacitance: The total small signal capacitance between the diode terminals of a complete device.
I_F	Forward Current: The forward current dc value, no alternating component.
I_{FSM}	Maximum Forward Surge Current: The forward current, surge peak or rated forward surge current.
I_O	Average Rectified Output Current: The output current averaged over a full cycle with a 50 Hz or 60 Hz sine-wave input and a 180 degree conduction angle.
I_R	Reverse Current: The maximum reverse (leakage) current that will flow at the specified voltage and temperature.
V_F	Maximum Forward Voltage: The maximum forward voltage the device will exhibit at a specified current.
V_R	Reverse Voltage: The reverse voltage dc value, no alternating component.
V_{RRM}	Repetitive Peak Reverse Voltage: The peak reverse voltage including all repetitive transient voltages but excluding all non-repetitive transient voltages.
V_{RWM}	Working Peak Reverse Voltage: The maximum peak voltage that can be applied over the operating temperature range excluding all transient voltages (ref JESD282-B). Also sometimes known as PIV.

ELECTRICAL CHARACTERISTICS

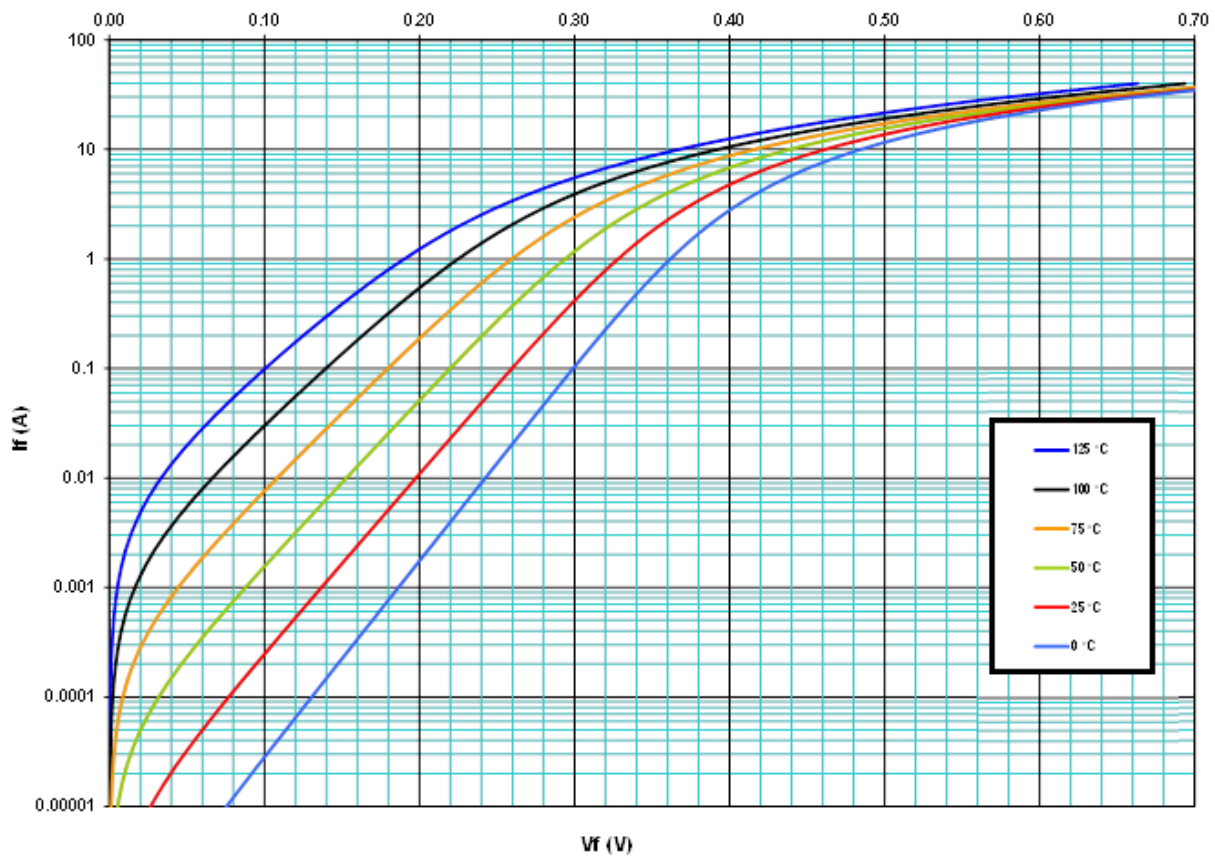
Part Number	Working Peak Reverse Voltage V_{RWM}	Maximum RMS Voltage V_{RMS}	Maximum Peak Repetitive Voltage V_{RRM}	Maximum Forward Voltage (Note 1)				Maximum Reverse Current $I_R @ V_{RWM}$	Maximum Voltage Rate of Change dV/dt
				$V_F @ 3 A$	$V_F @ 8 A$	$V_F @ 10 A$	$V_F @ 15 A$		
	Volts	Volts	Volts	Volts	Volts	Volts	Volts	mA	V/ μs
UPS840e3	40	28	40	0.39	0.45	0.49	0.535	0.5	1000

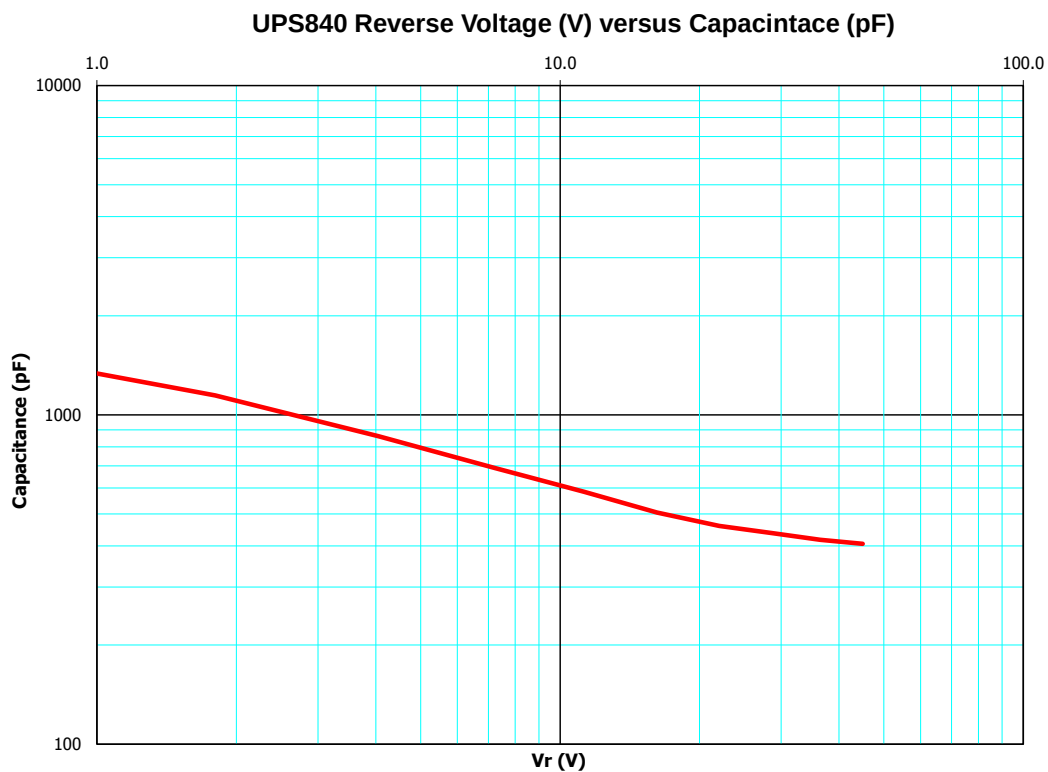
NOTES: (1) Pulse test, 1% duty cycle.

GRAPHS
Maximum Thermal Impedance
UPS840 Powermite 3, Schottky Chip, Soldered to Cu Plate


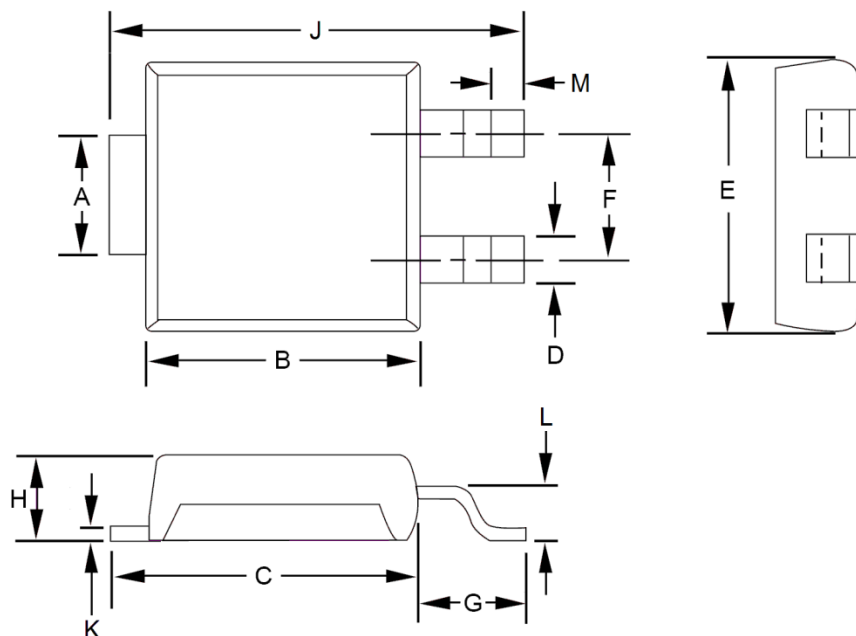


Schottky Vf-If Typical Characteristics



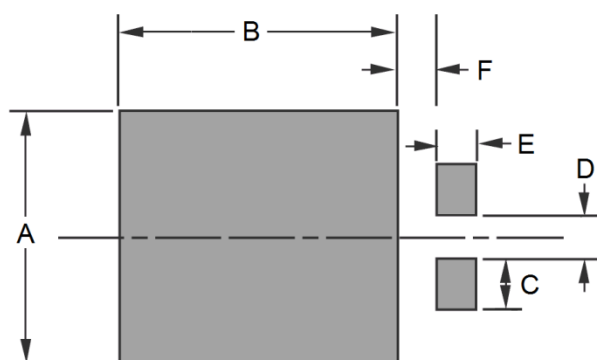


PACKAGE DIMENSIONS



DIM	INCH		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.068	0.072	1.73	1.83
B	0.172	0.174	4.37	4.43
C	0.197	0.204	5.01	5.17
D	0.035 NOM		0.889 NOM	
E	0.159	0.161	4.03	4.09
F	0.072 NOM		1.83 NOM	
G	0.056 NOM		1.422 NOM	
H	0.043	0.045	1.10	1.14
J	0.252	0.260	6.40	6.61
K	0.007 NOM		0.178 NOM	
L	0.028	0.030	0.71	0.77
M	0.014	0.018	0.36	0.46

PAD LAYOUT



DIM	INCH	MILLIMETERS
	NOMINAL	NOMINAL
A	0.190	4.826
B	0.210	5.344
C	0.038	0.965
D	0.034	0.864
E	0.030	0.762
F	0.030	0.762

SCHEMATIC

