

TPS3836E18-Q1 / J25-Q1 / H30-Q1 / L30-Q1 / K33-Q1
TPS3837E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1, TPS3838E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1
NANOPOWER SUPERVISORY CIRCUITS

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TPS3836E18-Q1 / J25-Q1 / H30-Q1 / L30-Q1 / K33-Q1
TPS3837E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1, TPS3838E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1

TPS3836E18-Q1 / J25-Q1 / H30-Q1 / L30-Q1 / K33-Q1
TPS3837E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1, TPS3838E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1
NANOPOWER SUPERVISORY CIRCUITS

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TPS3836E18-Q1 / J25-Q1 / H30-Q1 / L30-Q1 / K33-Q1
TPS3837E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1, TPS3838E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1
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Supply voltage, V_{DD} (see Note 1)	7 V
All other pins (see Note 1)	-0.3 V to 7 V
Maximum low output current, I_{OL}	5 mA
Maximum high output current, I_{OH}	-5 mA
Input clamp current, I_{IK} ($V_I < 0$ or $V_I > V_{DD}$)	± 10 mA
Output clamp current, I_{OK} ($V_O < 0$ or $V_O > V_{DD}$)	± 10 mA
Continuous total power dissipation	See Dissipation Rating Table
Operating free-air temperature range, T_A	-40°C to 125°C
Storage temperature range, T_{stg}	-65°C to 150°C
Soldering temperature	260°C

† Stresses beyond those listed under “absolute maximum ratings” may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated under “recommended operating conditions” is not implied. Exposure to absolute-maximum-rated conditions for extended periods may affect device reliability.

NOTE 1: All voltage values are with respect to GND. For reliable operation, the device must not be operated at 7 V for more than $t=1000$ h continuously

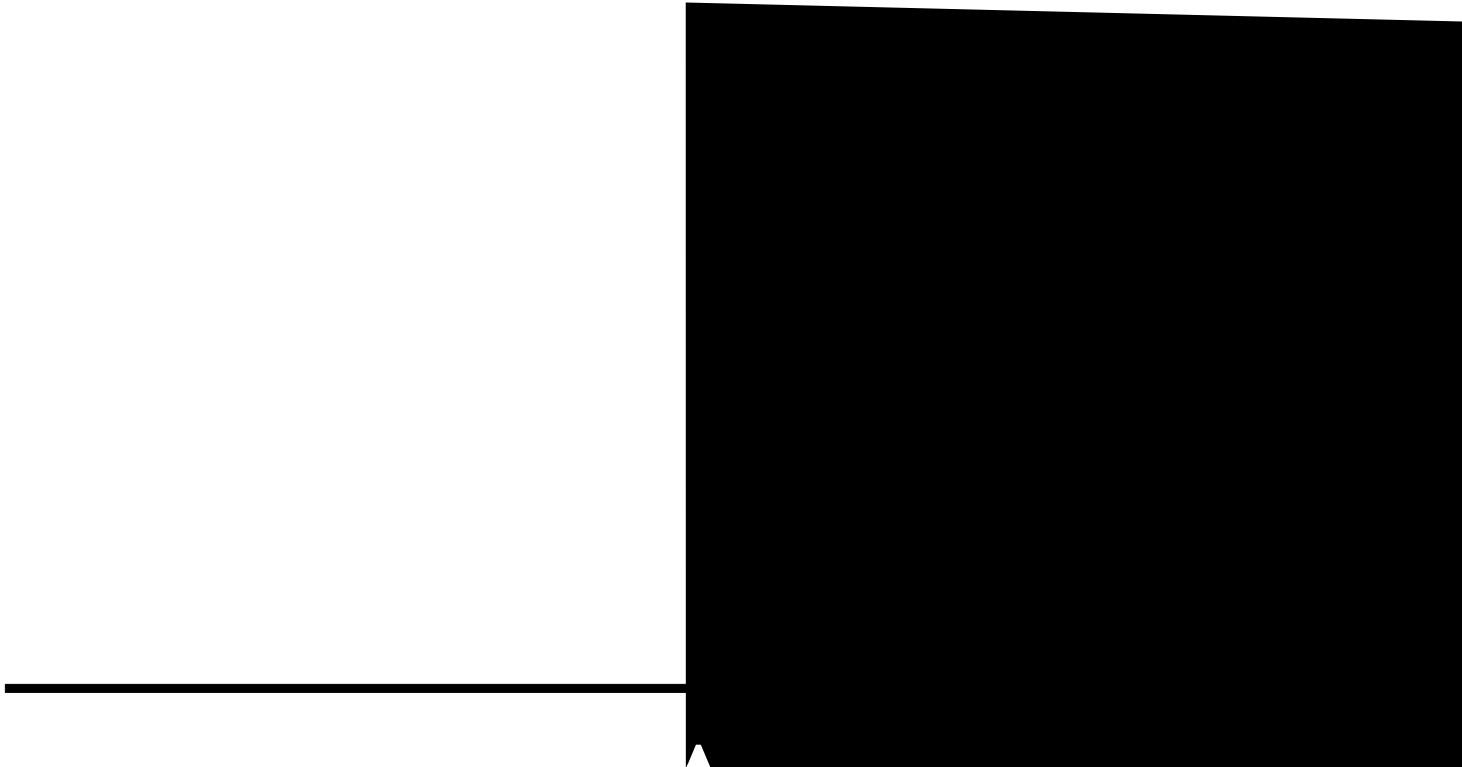
DBV	437 mW	3.5 mW/°C	280 mW	227 mW	87 mW
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	1.6	6	V
Supply voltage, V_{DD}			
Input voltage, V_I	0	$V_{DD} + 0.3$	V
High-level input voltage, V_{IH}	$0.7 \times V_{DD}$		V
Low-level input voltage, V_{IL}	$0.3 \times V_{DD}$		V



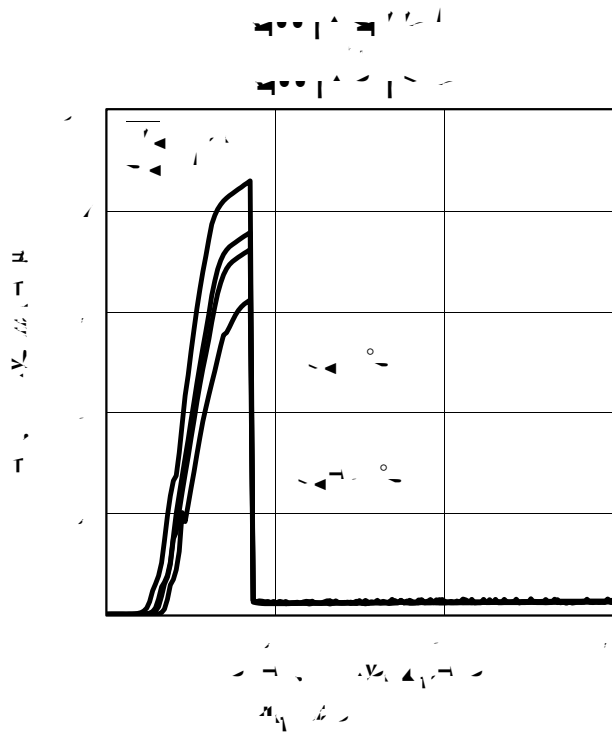
TPS3836E18-Q1 / J25-Q1 / H30-Q1 / L30-Q1 / K33-Q1
TPS3837E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1, TPS3838E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1
NANOPOWER SUPERVISORY CIRCUITS

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TPS3836E18-Q1 / J25-Q1 / H30-Q1 / L30-Q1 / K33-Q1
TPS3837E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1, TPS3838E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1
NANOPOWER SUPERVISORY CIRCUITS

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**TPS3836E18-Q1 / J25-Q1 / H30-Q1 / L30-Q1 / K33-Q1
TPS3837E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1, TPS3838E18-Q1 / J25-Q1 / L30-Q1 / K33-Q1
NANOPOWER SUPERVISORY CIRCUITS**

PACKAGING INFORMATION

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead/Ball Finish	MSL Peak Temp (3)	Op Temp (°C)
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Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead/Ball Finish	MSL Peak Temp (3)	
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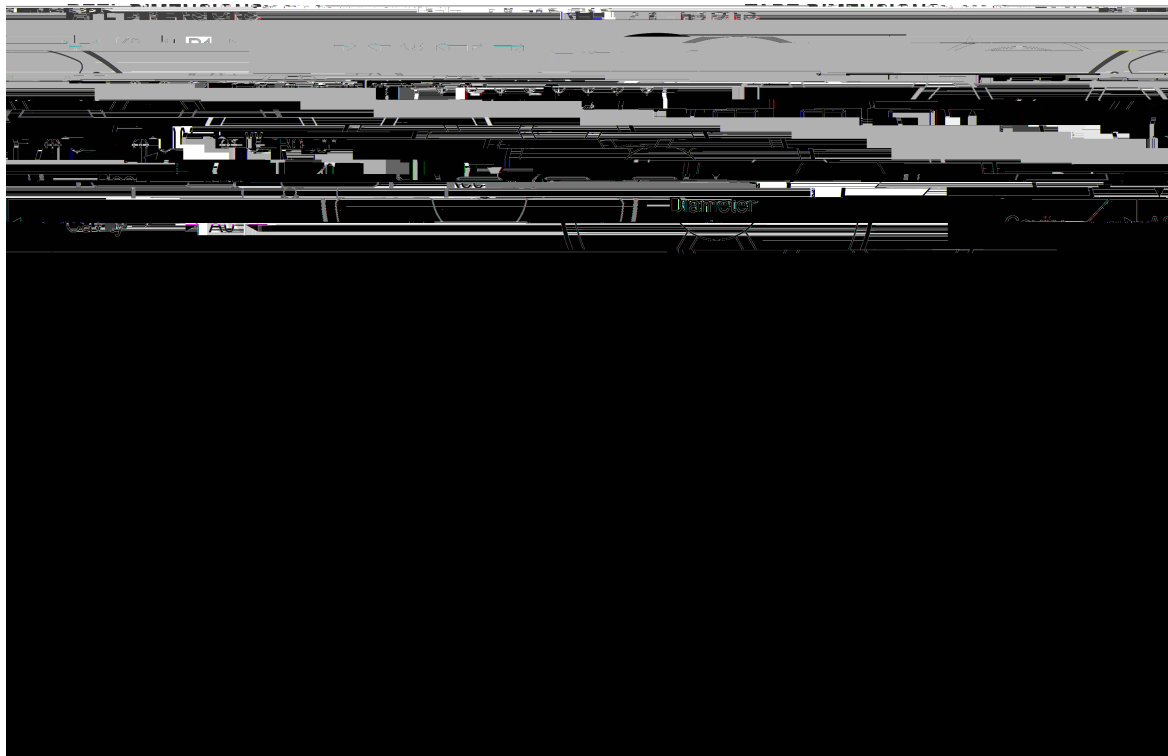
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OTHER QUALIFIED VERSIONS OF TPS3836E18-Q1, TPS3836H30-Q1, TPS3836J25-Q1, TPS3836K33-Q1, TPS3836L30-Q1, TPS3837E18-Q1, TPS3837J25-Q1, TPS3837K33-Q1, TPS3837L30-Q1, TPS3838E18-Q1, TPS3838J25-Q1, TPS3838K33-Q1, TPS3838L30-Q1 :

- Catalog: [TPS3836E18](#), [TPS3836H30](#), [TPS3836J25](#), [TPS3836K33](#), [TPS3836L30](#), [TPS3837E18](#), [TPS3837J25](#), [TPS3837K33](#), [TPS3837L30](#), [TPS3838E18](#), [TPS3838J25](#), [TPS3838K33](#), [TPS3838L30](#)
- Enhanced Product: [TPS3836J25-EP](#), [TPS3836L30-EP](#), [TPS3837K33-EP](#)

NOTE: Qualified Version Definitions:

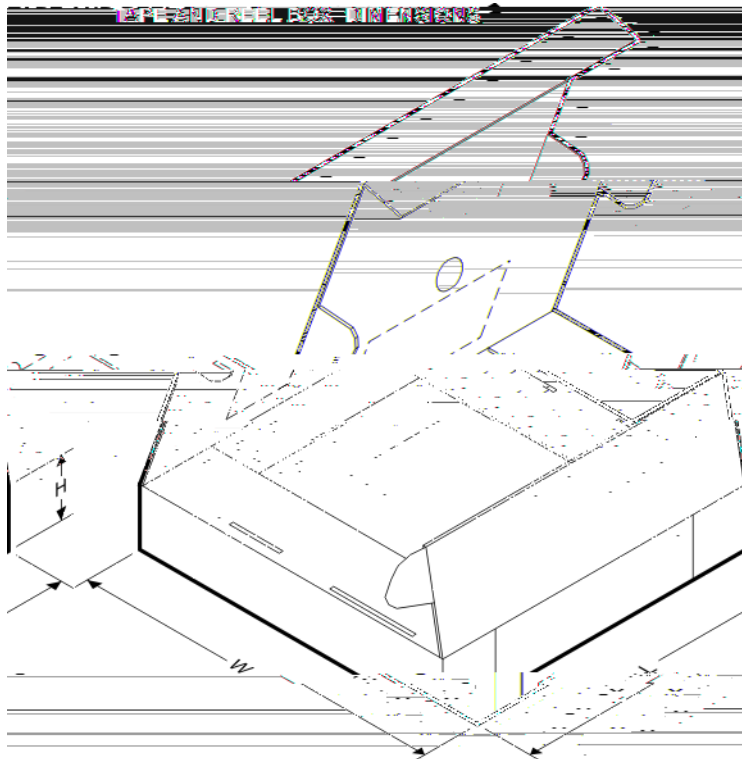
- Catalog - TI's standard catalog product
- Enhanced Product - Supports Defense, Aerospace and Medical Applications

TAPE AND REEL INFORMATION


*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
2U3836E18QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3836H30QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3836J25QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3836K33QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3836L30QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3837E18QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3837J25QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3837K33QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3837L30QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3838E18QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3838J25QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3838K33QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
2U3838L30QDBVRG4Q1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
TPS3836E18QDBVRQ1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
TPS3836H30QDBVRQ1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
TPS3836J25QDBVRQ1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
TPS3836K33QDBVRQ1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
TPS3836L30QDBVRQ1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3

Device	Package Type	Package Drawing	Pins	SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
TPS3837L30QDBVRQ1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
TPS3838E18QDBVRQ1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
TPS3838J25QDBVRQ1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
TPS3838K33QDBVRQ1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3
TPS3838L30QDBVRQ1	SOT-23	DBV	5	3000	180.0	9.0	3.15	3.2	1.4	4.0	8.0	Q3



*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)
2U3836E18QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
2U3836H30QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
2U3836J25QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
2U3836K33QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
2U3836L30QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
2U3837E18QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
2U3837J25QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
2U3837K33QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
2U3837L30QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
2U3838E18QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
2U3838J25QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
2U3838K33QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0

Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)
2U3838L30QDBVRG4Q1	SOT-23	DBV	5	3000	182.0	182.0	20.0
TPS3836E18QDBVRQ1	SOT-23	DBV	5	3000	182.0	182.0	20.0
TPS3836H30QDBVRQ1	SOT-23	DBV	5	3000	182.0	182.0	20.0
TPS3836J25QDBVRQ1	SOT-23	DBV	5	3000	182.0	182.0	20.0
TPS3836K33QDBVRQ1	SOT-23	DBV	5	3000	182.0	182.0	20.0
TPS3836L30QDBVRQ1	SOT-23	DBV	5	3000	182.0	182.0	20.0
TPS3837L30QDBVRQ1	SOT-23	DBV	5	3000	182.0	182.0	20.0
TPS3838E18QDBVRQ1	SOT-23	DBV	5	3000	182.0	182.0	20.0
TPS3838J25QDBVRQ1	SOT-23	DBV	5	3000	182.0	182.0	20.0
TPS3838K33QDBVRQ1	SOT-23	DBV	5	3000	182.0	182.0	20.0
TPS3838L30QDBVRQ1	SOT-23	DBV	5	3000	182.0	182.0	20.0

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