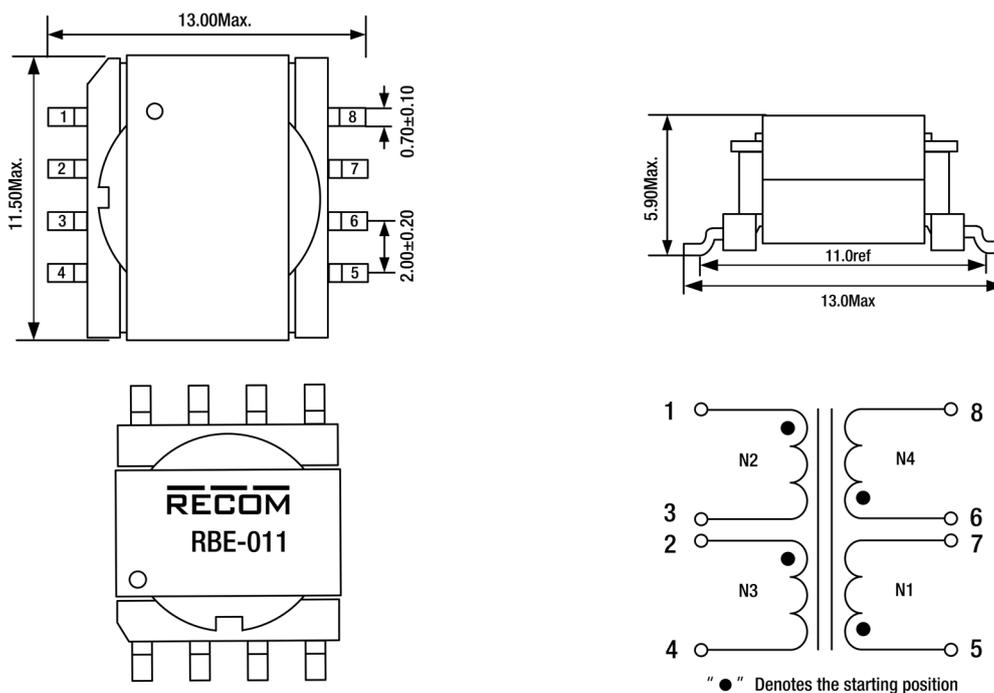


### PRODUCT FEATURES

- Small-Sized Isolation Transformer
- SMD Surface Mount Installation
- Isolation Voltage: 1500VDC/1minute
- Storage Temperature: -40~125°C
- Operating Temperature (Ambient Temperature + Temperature Rise): -40~125°C
- Reflow Soldering Temperature: Peak Temperature  $\leq 245^{\circ}\text{C}(10\text{s})$
- Reflow Soldering Cycles: Maximum recommended  $\leq 2$  times
- Maximum Product Dimensions (MAX): 13.0mm  $\times$  11.5mm  $\times$  5.9mm

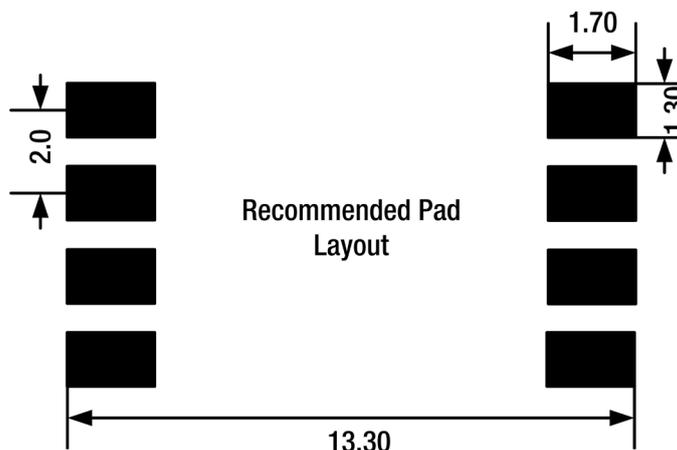
### DIMENSIONS AND SCHEMATIC DIAGRAM [mm]



### PRODUCT MARKING

Pin1	○
Marking	Company Logo
	Product Model

### RECOMMENDED LAND PATTERN [mm]



**ELECTRICAL PROPERTIES**

Properties		Test Conditions	Value	Unit	Tol.
Inductance	L	1-3	15	μH	Typ.
Turns Ratio	n	N1:N2:N3:N4	1:1.67:1:1		
DC Resistance 1	R <sub>DC1</sub>	1-3	0.1	Ω	Max
DC Resistance 2	R <sub>DC2</sub>	2-4	0.4	Ω	Max
DC Resistance 3	R <sub>DC3</sub>	5-7	0.07	Ω	Max
DC Resistance 4	R <sub>DC4</sub>	6-8	0.09	Ω	Max
Interwinding Capacitance	C <sub>VWV</sub>	1-8	30	PF	Max
Leakage Inductance	L <sub>S</sub>	1-3	0.5	uH	Max
Insulation Test Voltage	V <sub>T</sub>	N2,3 : N1,4 / 60s/1mA	1500	V(DC)	1 min.

**GENERAL INFORMATION**

Operating Temperature	-40~125°C
Storage Conditions (in original packaging)	<40°C/<75%RH
Moisture Sensitivity Level (MSL)	1
Electrical Specifications @ 25°C unless otherwise noted	

**MATERIAL CERTIFICATION**

ITEM		UL NO
1	BOBBIN	E41429
2	WIRE	E253843
3	TAPE	E165111
4	GLUE	E218090

**CERTIFICATION**

RoHS Approval	Compliant [2011/65/EU&2015/863]
REACH Approval	Conform or declared [(EC)1907/2006]
Halogen Free	Conform [EN 14582:2016]

**TYPICAL APPLICATION**

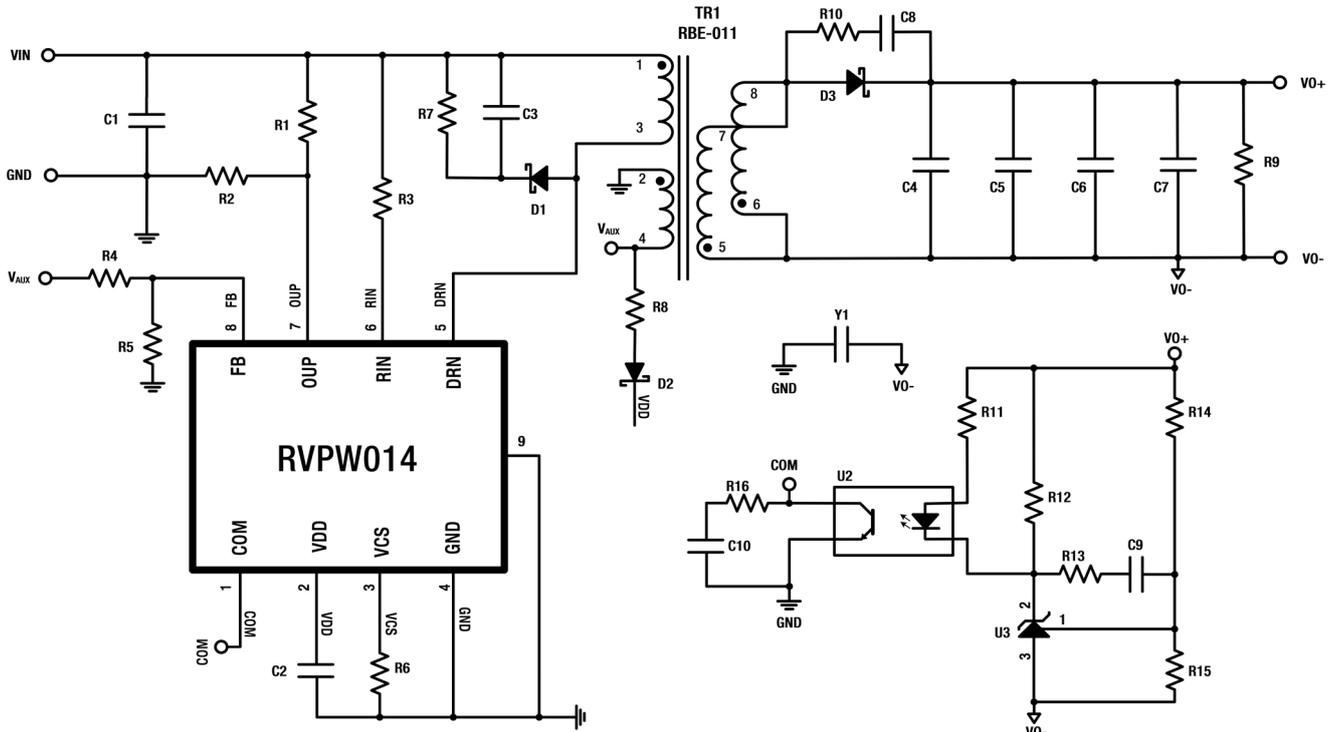
Input Voltage	V <sub>IN</sub>	9-36	V(DC)
Output Voltage 1	V <sub>OUT1</sub>	5	V(DC)
Output Current 1	I <sub>OUT1</sub>	1200	mA
Switching Frequency	f <sub>switch</sub>	330	kHz

Input: N2

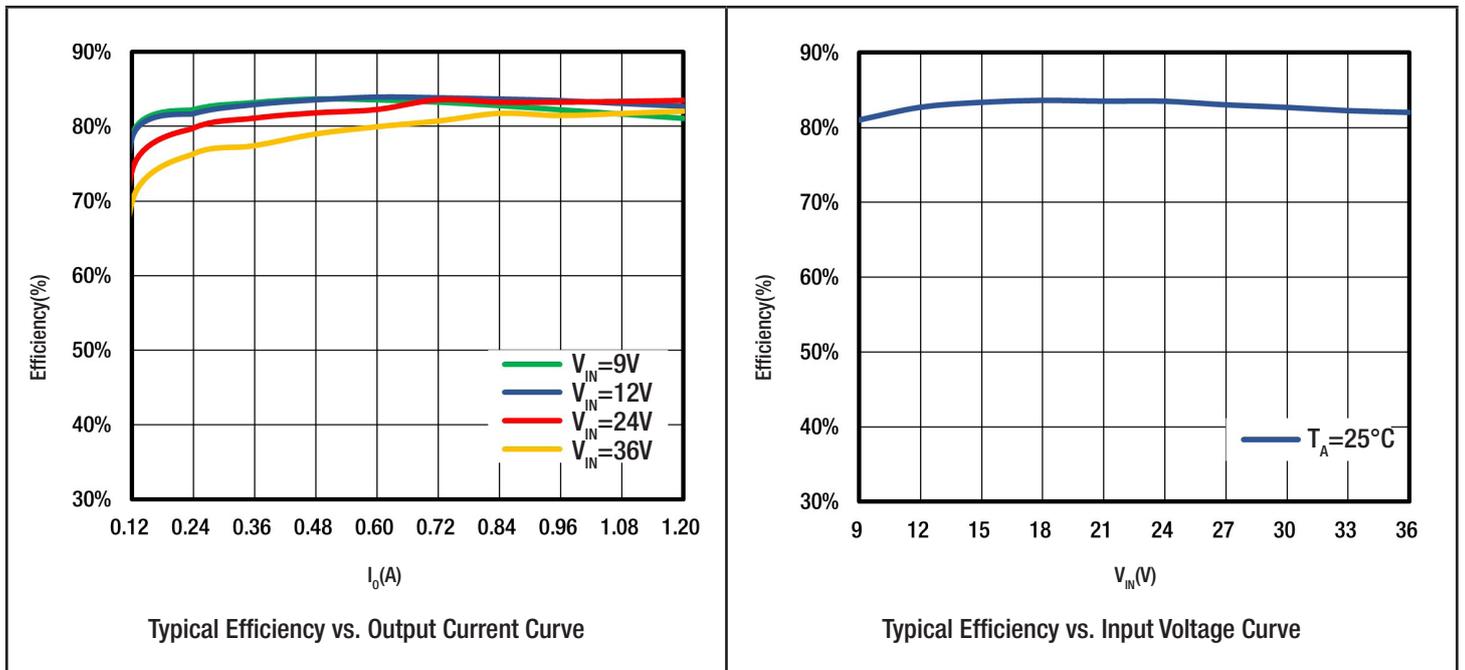
Output 1: N1/N4

Table and graph show a typical application. Values may vary by application.

### REFERENCE CIRCUIT DIAGRAM

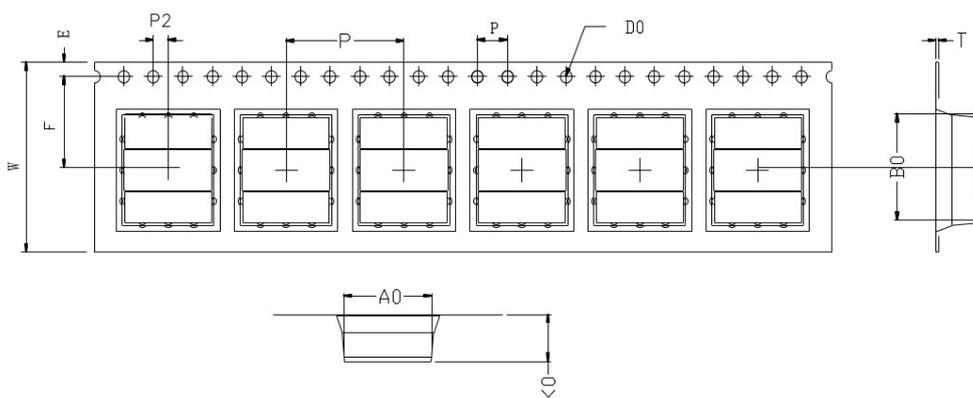


### Typical Curve:

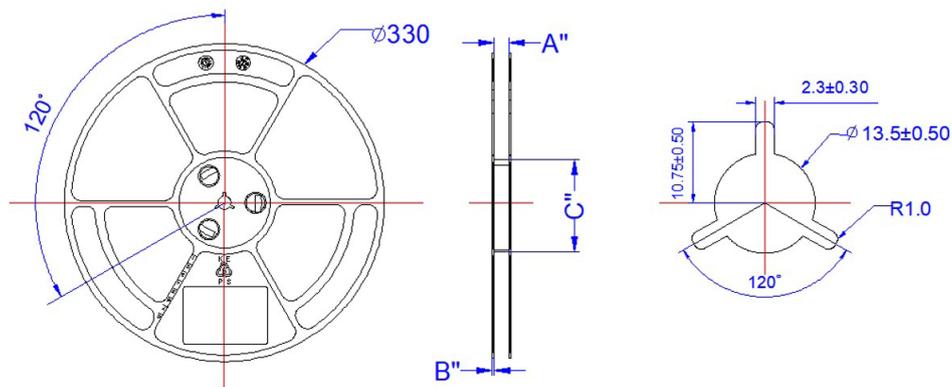


### PACKAGING SPECIFICATION - TAPE [mm]

ITRM	W	A0	B0	K0	K1	P	F	E	D0	D1	P0	P2	T
DIM	24.00	11.50	13.10	6.10	--	16.00	11.50	1.75	1.50	--	4.00	2.00	0.40
TOLE	+0.30 -0.30	+0.15 -0.15	+0.15 -0.15	+0.10 -0.10	+0.10 -0.10	+0.10 -0.10	+0.10 -0.10	+0.10 -0.10	+0.10 -0.00	+0.10 -0.00	+0.10 -0.10	+0.15 -0.15	+0.05 -0.05

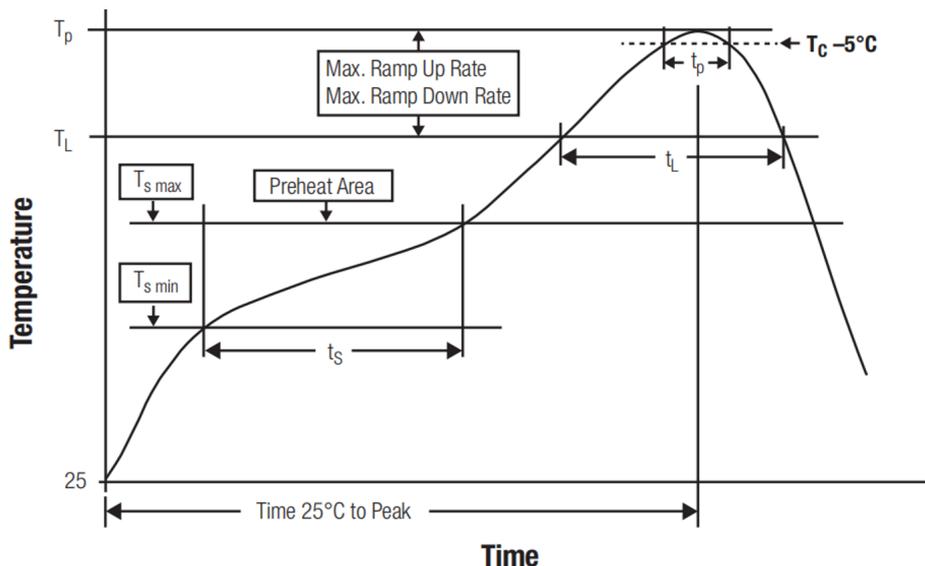


### Reel [mm]



SPEC	16	24	32	44	56
DIM A'' ± 0.5	16.5	24.5	32.5	44.5	56.5
DIM B'' ± 0.3	2.10	2.10	2.10	2.10	2.10
DIM C'' ± 0.5	100	100	100	100	100

**CLASSIFICATION REFLOW PROFILE FOR SMT COMPONENTS**



Profile Feature		Value
Preheat Temperature Min	$T_{s\ min}$	150°C
Preheat Temperature Max	$T_{s\ max}$	200°C
Preheat Time $t_s$ from $T_{s\ min}$ to $T_{s\ max}$	$t_s$	100 seconds
Ramp-up Rate ( $T_L$ to $T_p$ )		3°C/second max.
Liquidous Temperature	$T_L$	217°C
Time $t_L$ maintained above $T_L$	$t_L$	100 seconds
Peak package body temperature	$T_p$	$T_p \leq T_c$ , see Table below
Time within 5°C of actual peak temperature	$t_p$	30 seconds
Ramp-down Rate ( $T_p$ to $T_L$ )		6°C/second max.
Time 25°C to peak temperature		5 minutes max.

Refer to IPC/JEDEC J-STD-020F

**PACKAGE CLASSIFICATION REFLOW TEMPERATURE ( $T_p$ )**

Properties	Volume mm <sup>3</sup> <350	Volume mm <sup>3</sup> 350-2000	Volume mm <sup>3</sup> >2000
PB-Free Assembly/Package Thickness < 1.6 mm	260 °C	260 °C	260 °C
PB-Free Assembly/Package Thickness 1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
PB-Free Assembly/Package Thickness > 2.5 mm	250 °C	245 °C	245 °C

Refer to IPC/JEDEC J-STD-020F



**ORDER INFORMATION**

Order Code	Marking Code*	Weight (g/pcs)	Package Type	Quantity (pcs/Reel)
RBE-011-UB5S-R	RBE-011	1.423g	Tape & Reel	500pcs

\*Marking Code

RBE011 — Product Code

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