

Preliminary

* This is tentative specification

Reset IC with automatic circuit current adjustment

DESCRIPTION

This product has a reset function.

It detects an abnormality in the power supply voltage and outputs a reset signal. This product has a built-in function that automatically adjusts the circuit current according to the load current of the output stage.

In addition, it has a built-in delay circuit, and by connecting an external capacitor, it is possible to set the reset release time.

The detection voltage can be arbitrarily set with an external resistor, and the hysteresis of the built-in comparator prevents malfunction due to chattering.

FEATURES

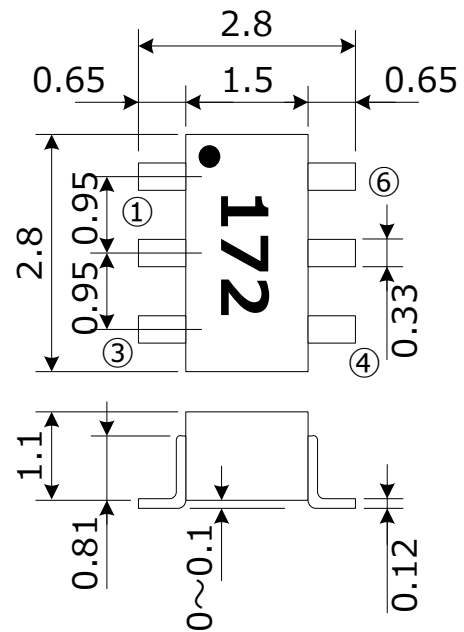
- The miniaturization of a set and high-density mounting are possible.
- Wide supply voltage range. (2V~38V)
- A detection voltage setup is possible by external resistance.
- A delay time setup is possible by external capacity.
- "L" reset output of open collector.
- The circuit current is automatically adjusted according to the load current.

APPLICATION

- Reset of logic circuit.
- Over voltage protection circuit

OUTLINE DRAWING

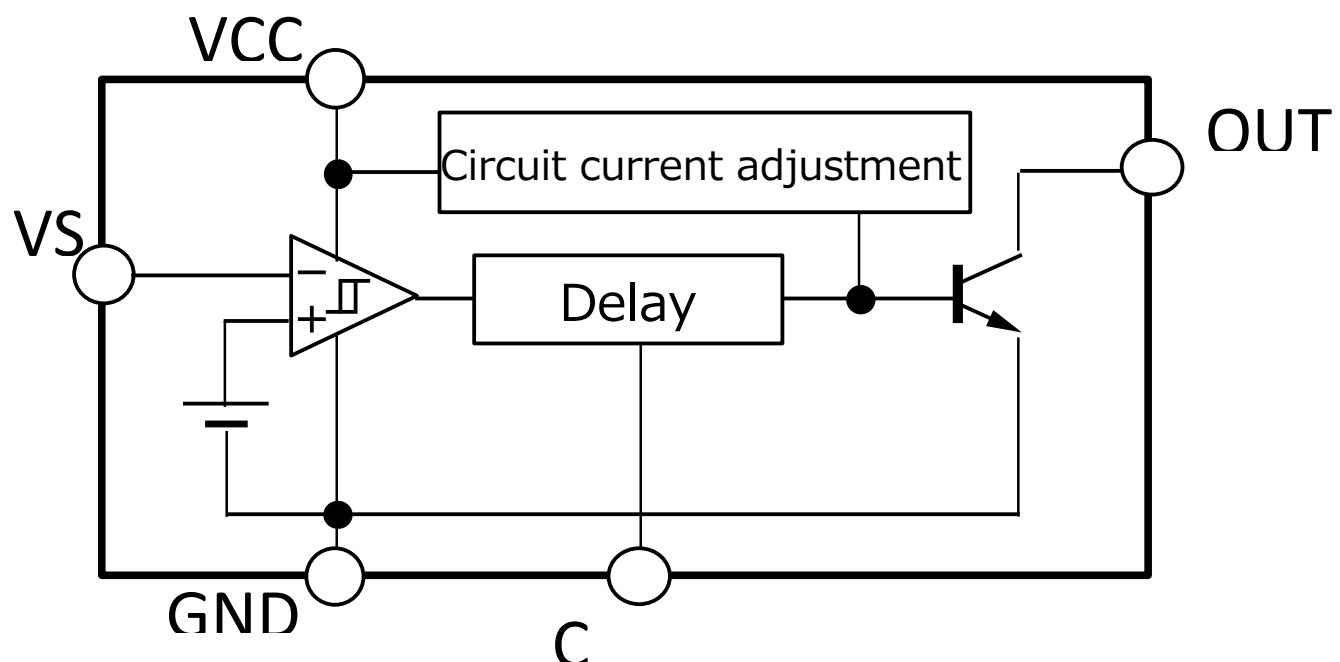
unit : mm



PIN layout

- | | |
|-------|------|
| ①VS | ⑥VCC |
| ②C | ⑤GND |
| ③N.C. | ④OUT |

BLOCK DIAGRAM



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ABSOLUTE MAXIMUM RATINGS (Ta=25°C unless otherwise noted.)

Symbol	Parameter	Ratings	Unit
Vcc	Supply voltage	40	V
Vout	Output voltage	40	V
Iout	Output sink current	20	mA
Pd	Power Dissipation	200	mW
Tj	Junction temperature	150	°C
Tstg	Operating temperature	-40~150	°C
Topr	Storage temperatur	-20~85	°C

ELECTRICAL CHARACTERISTIC (Ta=25°C,VCC=5V)

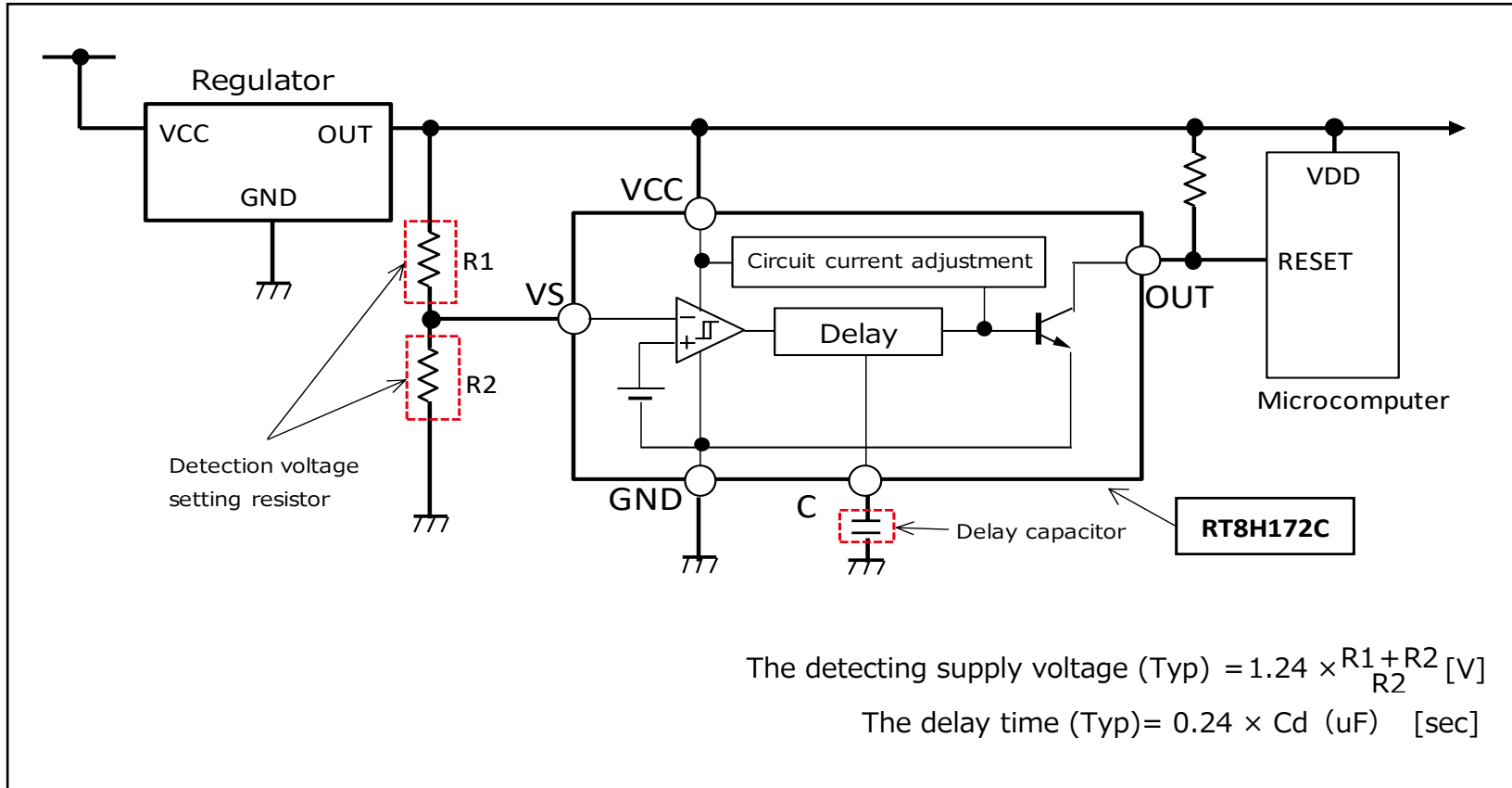
Symbol	Parameter	Test condition	Limits			Unit
			Min	Typ	Max	
Vcc	Supply voltage		2	-	38	V
Icc	Circuit current	OUT-15kΩ pull-up resistor, VS=3V	150	250	350	uA
VS	Detecting voltage	OUT-15kΩ pull-up resistor (H⇒L)	1.19	1.24	1.29	V
ΔVS	Hysterisis voltage		50	65	80	mV
Vs/ΔT	Detection voltage temperature coefficient		-	0.02	-	%/°C
VIN	Input voltage range		-0.3	-	Vcc	V
IIN	Input current	VS=1.5V	-	60	210	nA
Tpd	Delay time	Cd=0.1uF, VOUT : L→H	-	24	-	ms
Icd	Constant current at Cd pin	OUT-15kΩ pull-up resistor, VS=1.5V, Vcd=0V	-10	-5	-3	uA
Vo(sat)	Output saturation voltage	VS=0V, IL=3mA	-	0.2	0.4	V
IOL	Output leakage current	VOUT=5V	-	-	1	uA

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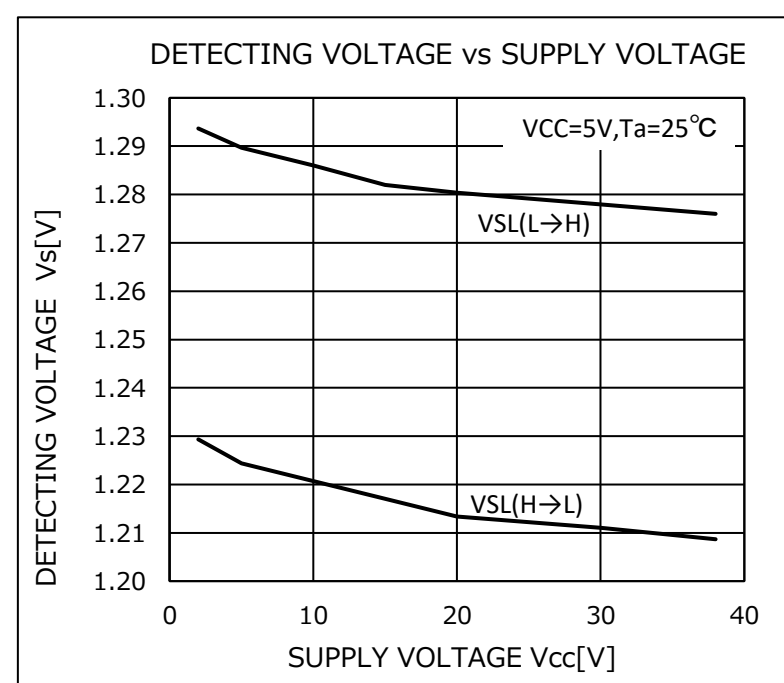
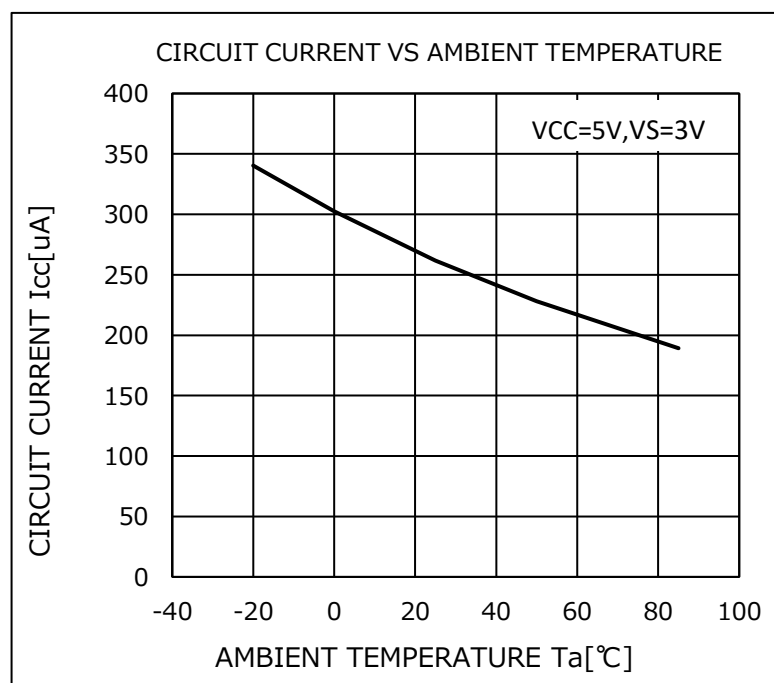
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APPLICATION CIRCUIT



«Typical Characteristic 1»



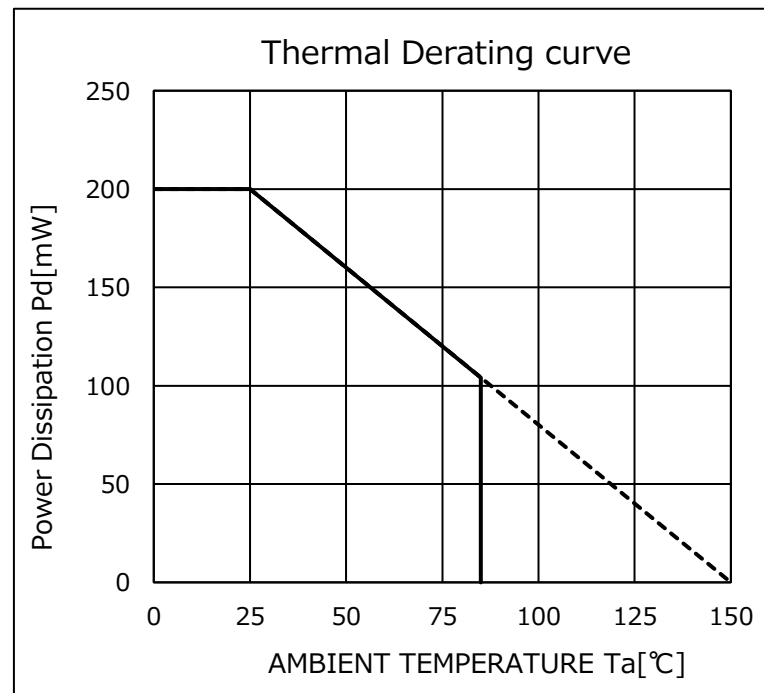
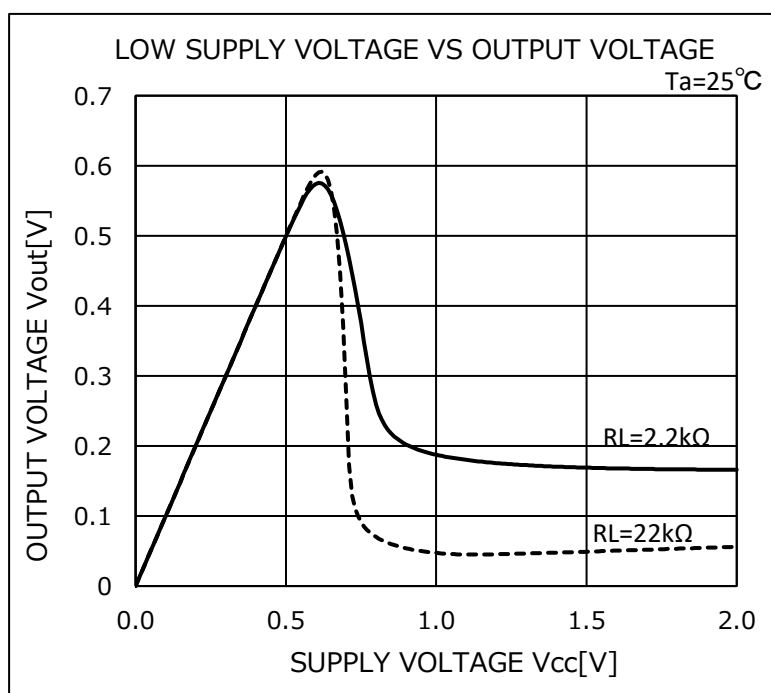
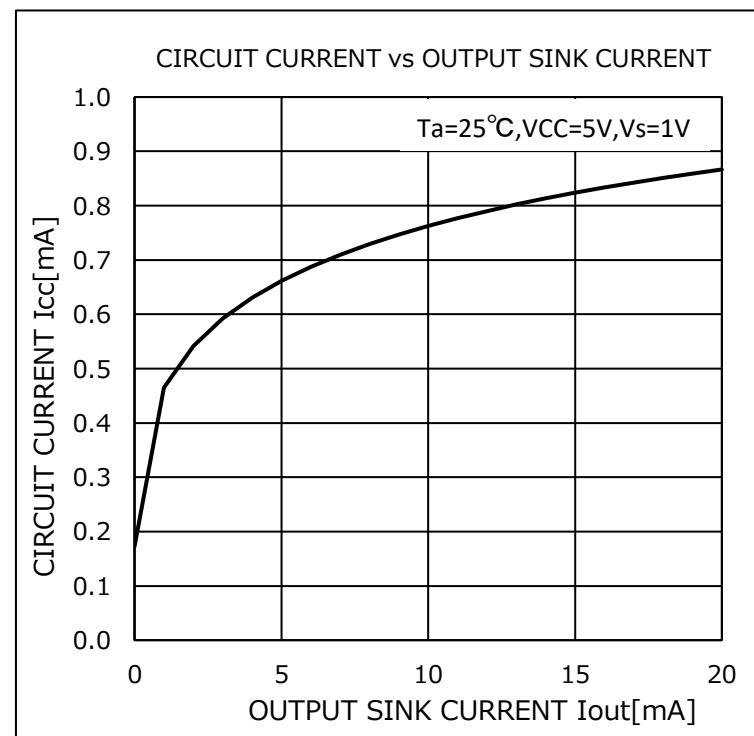
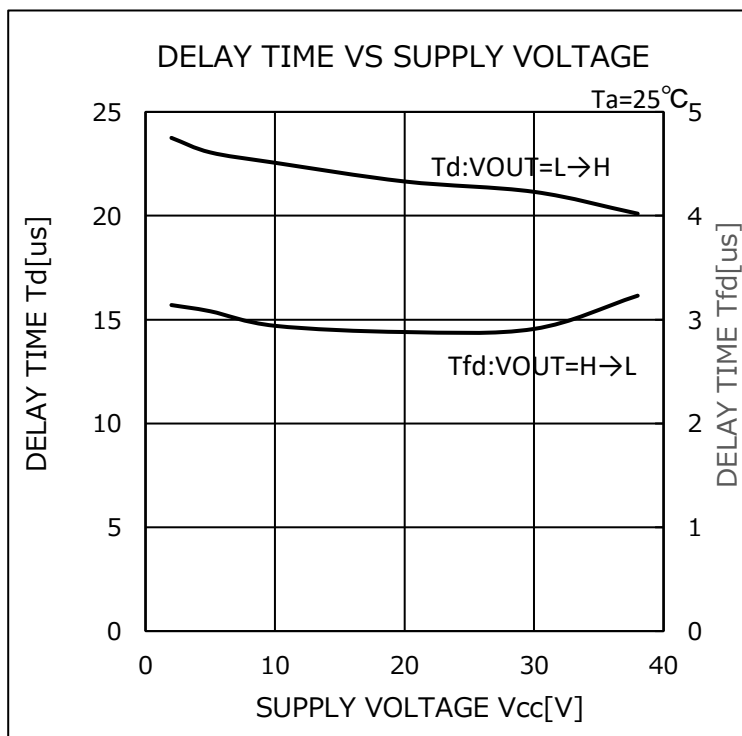
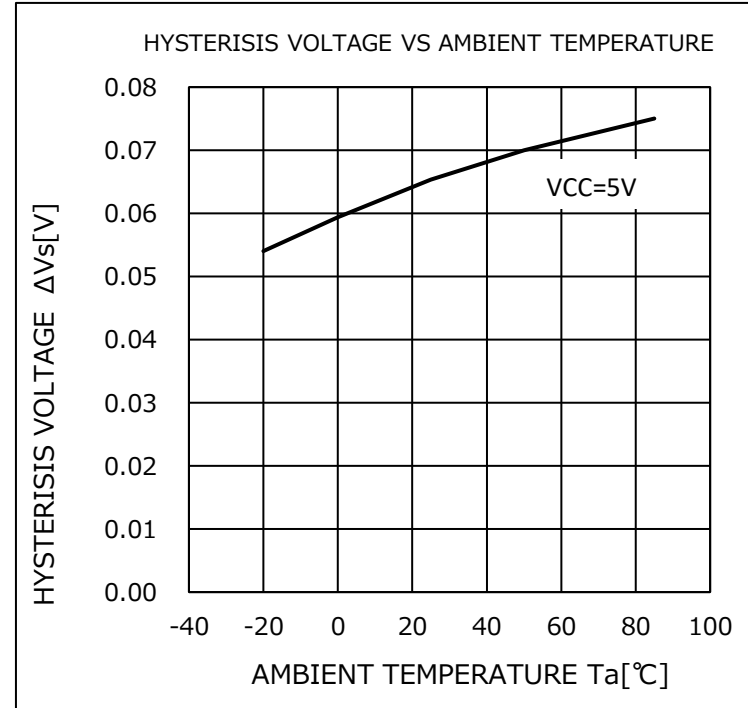
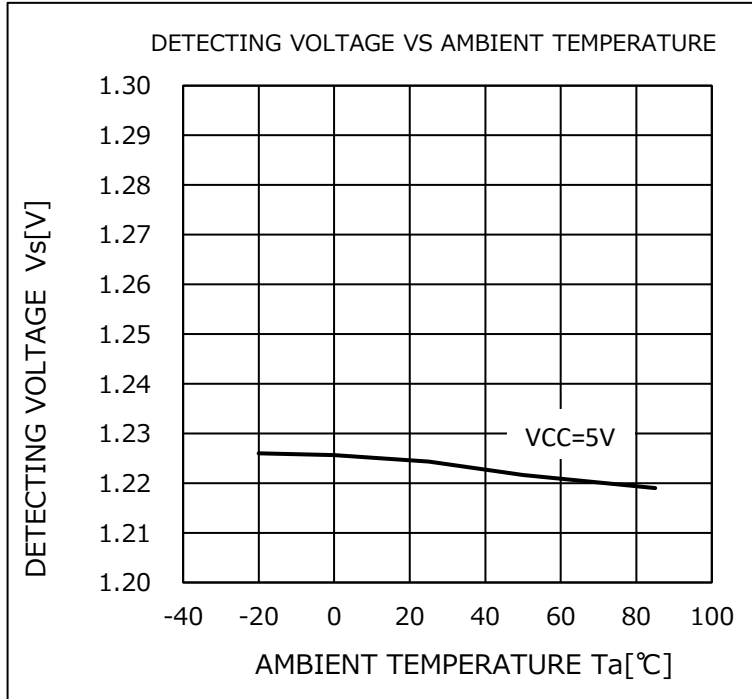
RT8H172C

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«Typical Characteristic 2»



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