

RT8H255C

IGBT Gate Driver

DESCRIPTION

RT8H255C is a integrating IGBT gate drive circuit.
This product can drive IGBT with two external transistors.
GATEIN terminal have hysteresis input voltage.
Case of "L→H" propagation, B terminal output low signal at over 2.80V. Case of "H→L" propagation, B terminal output high signal at under 2.48V.

FEATURE

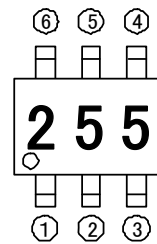
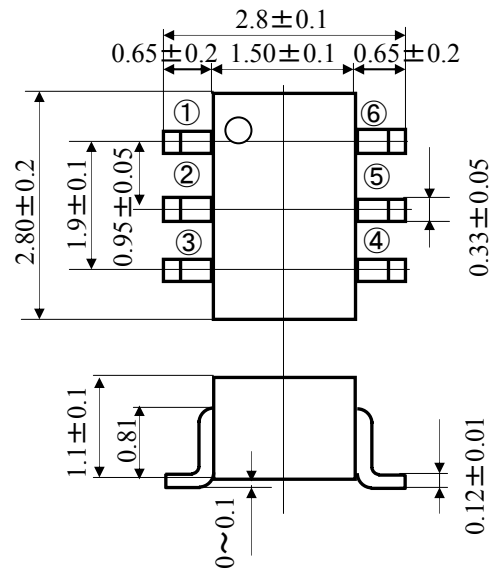
The miniaturization of a set and high-density mounting are possible.

APPLICATION

IGBT Gate Driver

PIN CONFIGURATION

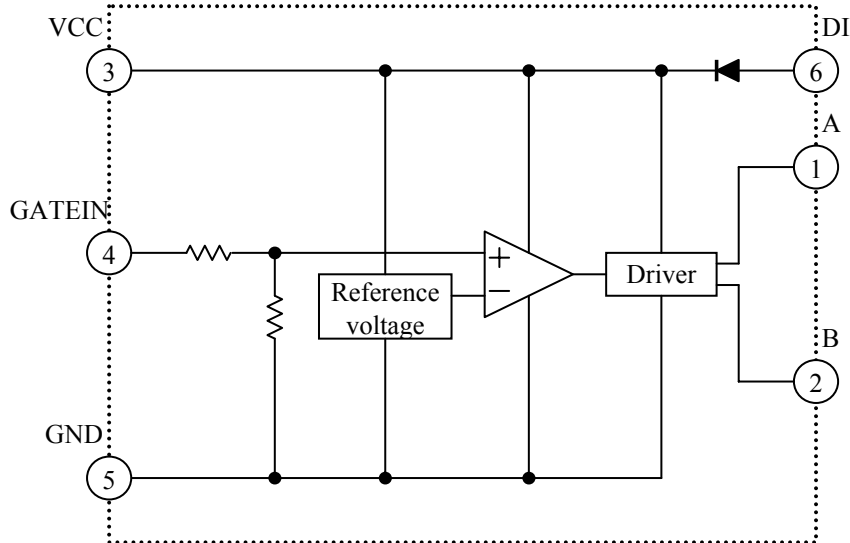
Unit:mm



Outline

- ①A
- ②B
- ③VCC
- ④GATEIN
- ⑤GND
- ⑥DI

BLOCK DIAGRAM



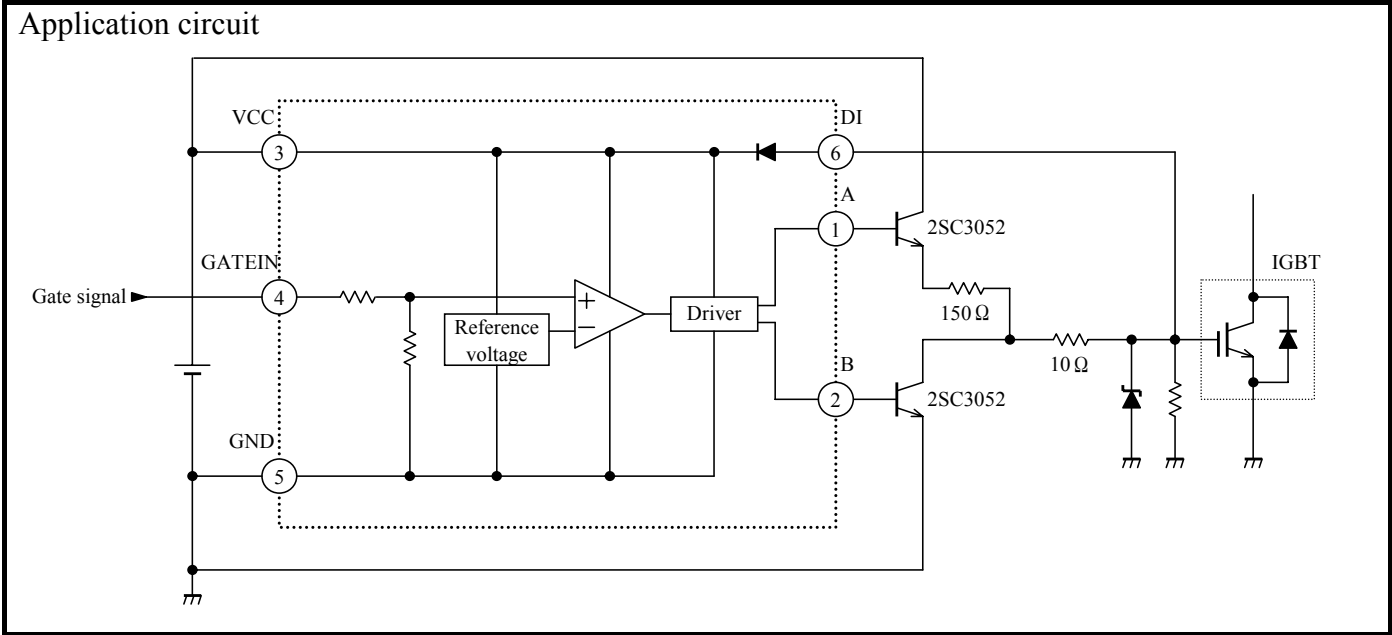
ABSOLUTE MAXIMUM RATINGS (Ta=25°C, unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply voltage		30	V
VGIN	IN terminal voltage		10	V
Pd	Power Dissipation	Ta ≥ 25°C	200	mW
Kθ	Thermal derating factor		1.6	mW/°C
Tj	Junction temperature		150	°C
Tstg	Storage temperature	Non condensing	-40~150	°C
Topr	Operating temperature	Non condensing	-20~75	°C

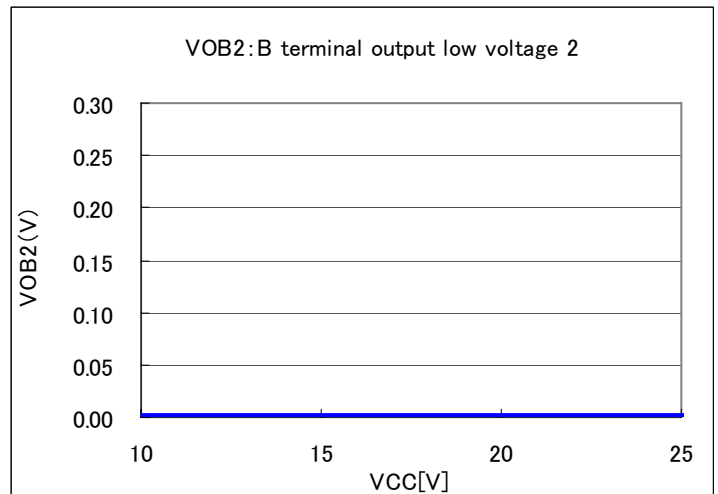
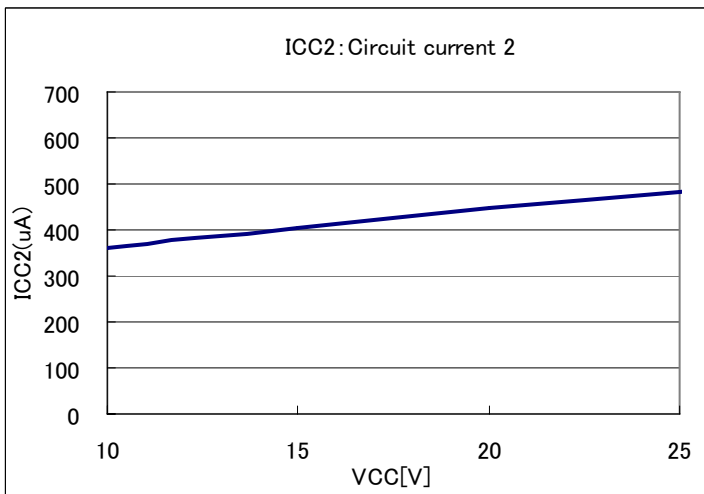
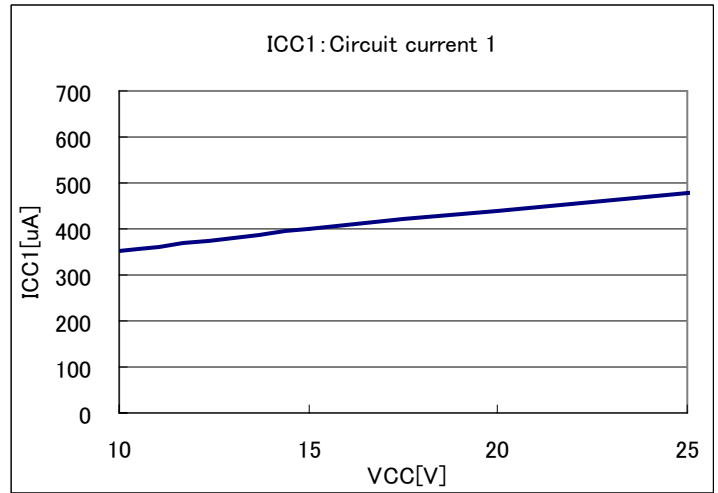
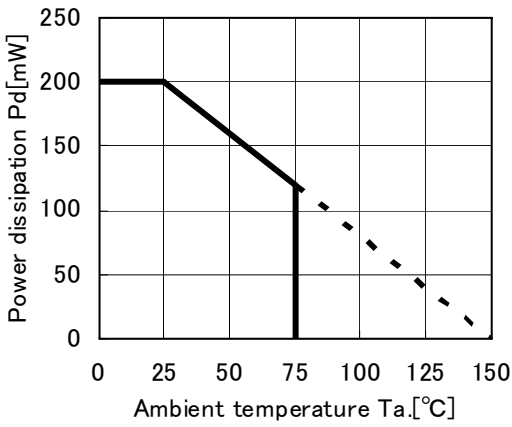
ELECTRICAL CHARACTERISTICS (Ta=25°C, VCC=20V, Terminal is open, unless otherwise notec)

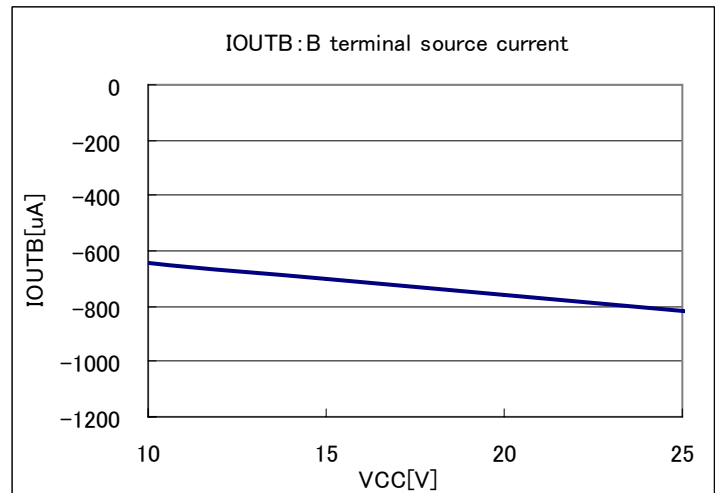
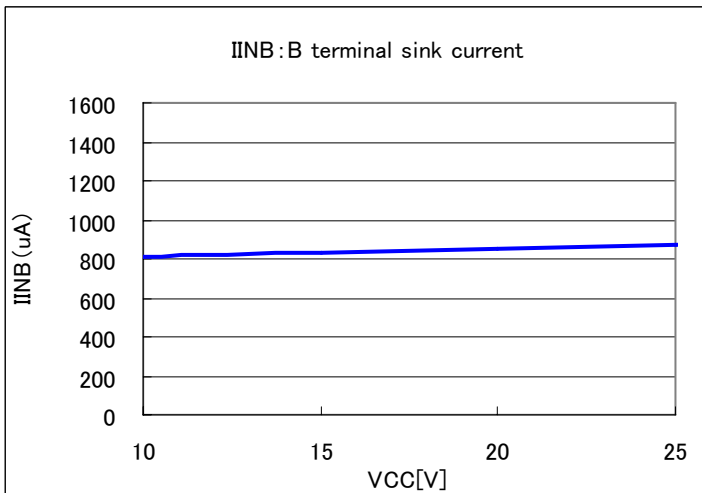
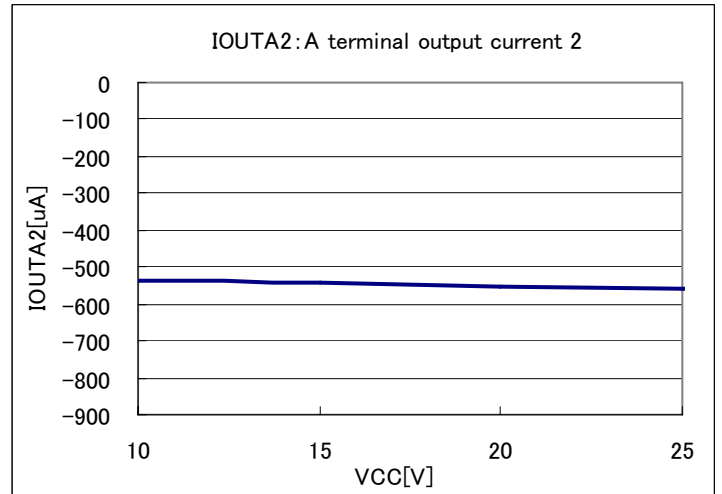
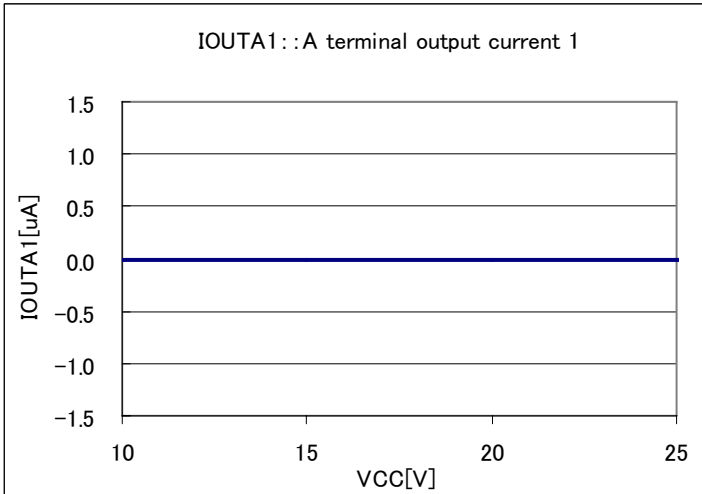
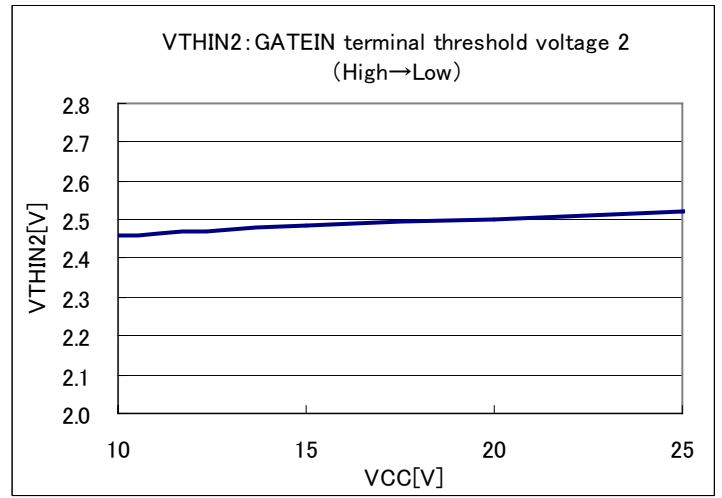
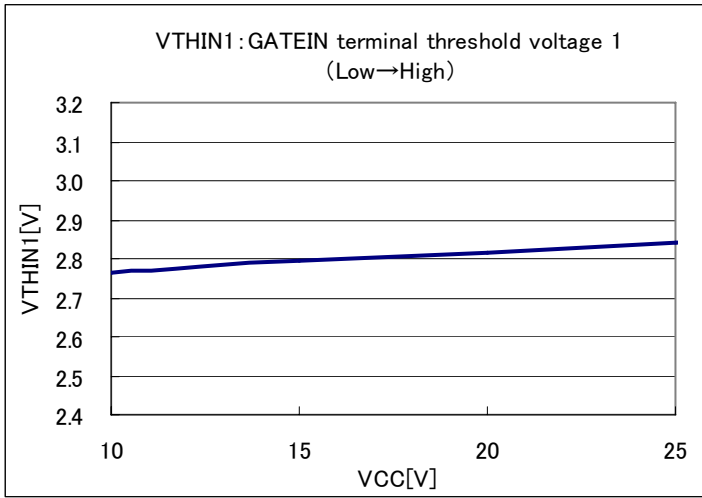
Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
Vcc	Operating supply voltage range		10	20	25	V
ICC1	Circuit current 1	GATEIN=0V	-	490	735	uA
ICC2	Circuit current 2	GATEIN=5V	-	500	750	uA
VOB2	B terminal output low voltage 2	GATEIN=5V	-	0	0.28	V
Vth1	GATEIN terminal threshold voltage 1 (Low→High)	GATEIN:0→5V VMB:Low	2.54	2.80	3.10	V
Vth2	GATEIN terminal threshold voltage 2 (High→Low)	GATEIN:5→0V VMB:High	2.24	2.48	2.74	V
IOUTA1	A terminal output current 1	GATEIN=0V, A=B=0.7V IMA	-1	0	1	uA
IOUTA2	A terminal output current 2	GATEIN=5V, A=18V IMA	-810	-600	-390	uA
IINB	B terminal sink current	GATEIN=5V, B=0.3V IMB	700	1080	1460	uA
IOUTB	B terminal source current	GATEIN=0V, B=0.7V IMB	-1120	-830	-540	uA

Application circuit



<TYPICAL CHARACTERISTICS>







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