

CY20AAH-8F

Nch IGBT for Strobe Flasher

REJ03G0509-0200

Preliminary

Rev.2.00

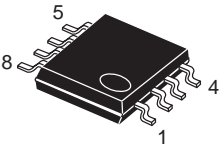
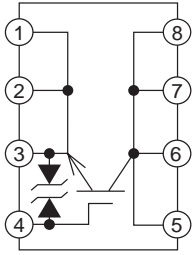
Nov 29, 2005

Features

- V_{CES} : 400 V
- I_{CM} : 130 A
- Drive voltage: 2.5 V

Outline

RENESAS Package code: PRSP0008DA-B
(Package name: SOP-8 <8P2S-B>)

1, 2 : Emitter
3 : Emitter (for the gate drive)
4 : Gate
5, 6, 7, 8 : Collector

Note: PIN 3 is for the Gate drive only.
Note that current from the main circuit cannot flow into this section. (Please see page 3)

Applications

Strobe flasher for cameras

Maximum Ratings

($T_c = 25^\circ\text{C}$)

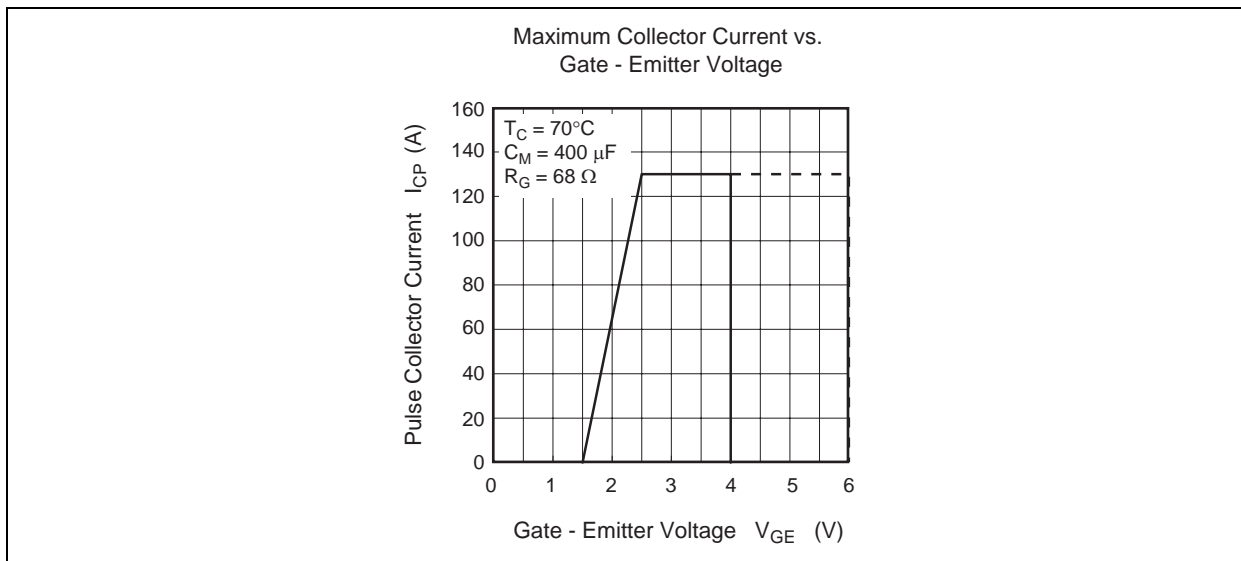
Parameter	Symbol	Ratings	Unit	Conditions
Collector-emitter voltage	V_{CES}	400	V	$V_{GE} = 0 \text{ V}$
Gate-emitter voltage	V_{GES}	± 4	V	$V_{CE} = 0 \text{ V}$
Peak gate-emitter voltage	V_{GEM}	± 6	V	$V_{CE} = 0 \text{ V}$, $t_w = 10 \text{ s}$
Collector current (Pulse)	I_{CM}	130	A	$C_M = 400 \mu\text{F}$ (see performance curve)
Junction temperature	T_j	- 40 to +150	$^\circ\text{C}$	
Storage temperature	T_{stg}	- 40 to +150	$^\circ\text{C}$	

Electrical Characteristics

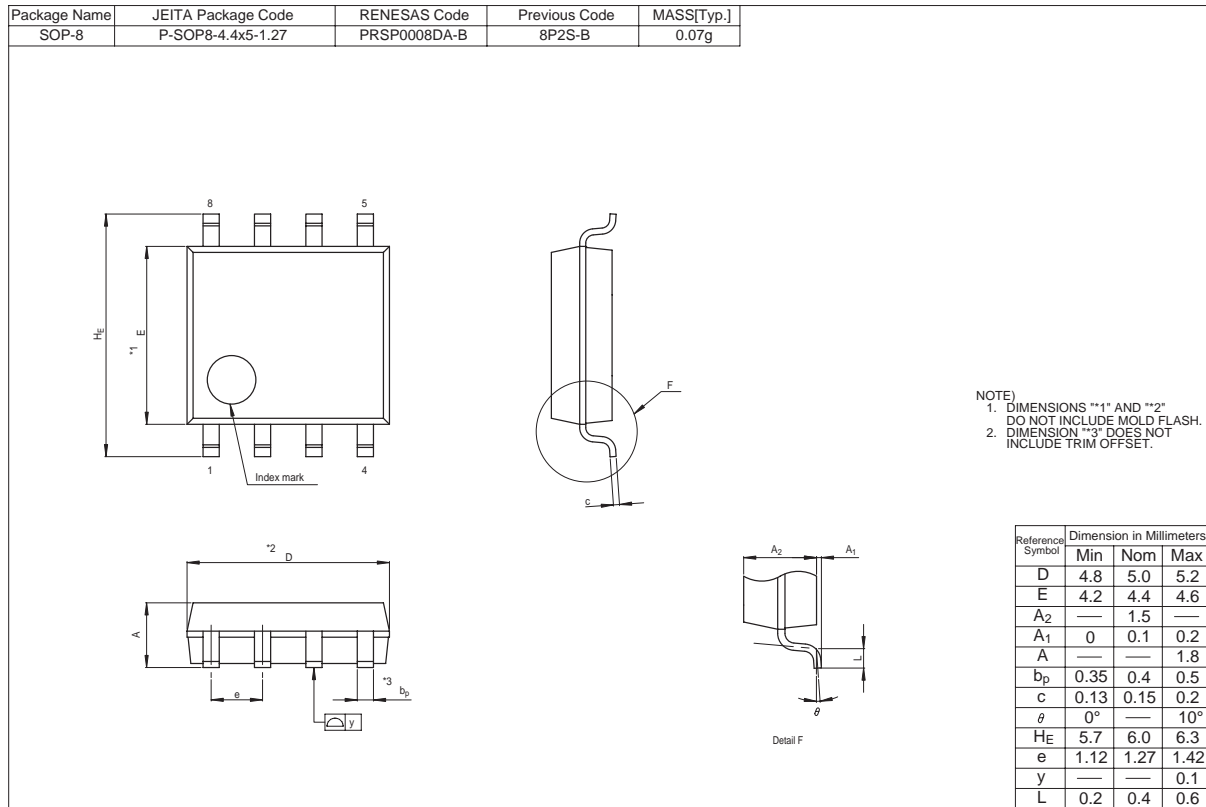
(T_j = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test conditions
Collector-emitter breakdown voltage	V _{(BR)CES}	450	—	—	V	I _C = 1 mA, V _{GE} = 0 V
Collector-emitter leakage current	I _{CES}	—	—	10	μA	V _{CE} = 400 V, V _{GE} = 0 V
Gate-emitter leakage current	I _{GES}	—	—	±10	μA	V _{GE} = ±6 V, V _{CS} = 0 V
Gate-emitter threshold voltage	V _{GE(th)}	0.4	0.6	1.2	V	I _C = 1 mA, V _{CE} = 10 V
Collector-Emitter saturation voltage	V _{CE(sat)}	—	3.5	7.0	V	I _C = 130 A, V _{GE} = 2.5 V
Input capacitance	C _{ies}	—	5500	—	pF	V _{CE} = 25 V, V _{GS} = 0 V, f = 1MHz

Performance Curves



Package Dimensions



Order Code

Lead form	Standard packing	Quantity	Standard order code	Standard order code example
Surface-mounted type	Taping	3000	Type name – T +Direction (1 or 2)+3	CY20AAH-8F-T13

Note: Please confirm the specification about the shipping in detail.

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Renesas Technology America, Inc.

450 Holger Way, San Jose, CA 95134-1368, U.S.A
Tel: <1> (408) 382-7500, Fax: <1> (408) 382-7501

Renesas Technology Europe Limited

Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K.
Tel: <44> (1628) 585-100, Fax: <44> (1628) 585-900

Renesas Technology (Shanghai) Co., Ltd.

Unit 205, AZIA Center, No.133 Yincheng Rd (n), Pudong District, Shanghai 200120, China
Tel: <86> (21) 5877-1818, Fax: <86> (21) 6887-7898

Renesas Technology Hong Kong Ltd.

7th Floor, North Tower, World Finance Centre, Harbour City, 1 Canton Road, Tsimshatsui, Kowloon, Hong Kong
Tel: <852> 2265-6688, Fax: <852> 2730-6071

Renesas Technology Taiwan Co., Ltd.

10th Floor, No.99, Fushing North Road, Taipei, Taiwan
Tel: <886> (2) 2715-2888, Fax: <886> (2) 2713-2999

Renesas Technology Singapore Pte. Ltd.

1 Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632
Tel: <65> 6213-0200, Fax: <65> 6278-8001

Renesas Technology Korea Co., Ltd.

Kukje Center Bldg. 18th Fl., 191, 2-ka, Hangang-ro, Yongsan-ku, Seoul 140-702, Korea
Tel: <82> (2) 796-3115, Fax: <82> (2) 796-2145

Renesas Technology Malaysia Sdn. Bhd

Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No.18, Jalan Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia
Tel: <603> 7955-9390, Fax: <603> 7955-9510