

CY25CAJ-8F

Nch IGBT for Strobe Flash

REJ03G1202-0200

Preliminary

Rev.2.00

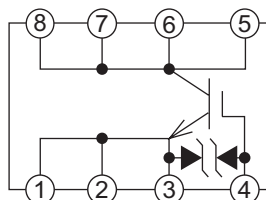
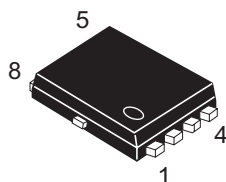
May 24, 2005

Features

- Ultra small surface mount package (VSON-8)
- V_{CES} : 400 V
- I_{CM} : 150 A
- Drive voltage: 4 V

Outline

PVSN0008JA-A
(Package Name: VSON-8<TNP-8DBV>)



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 flash for cameras

Maximum Ratings

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

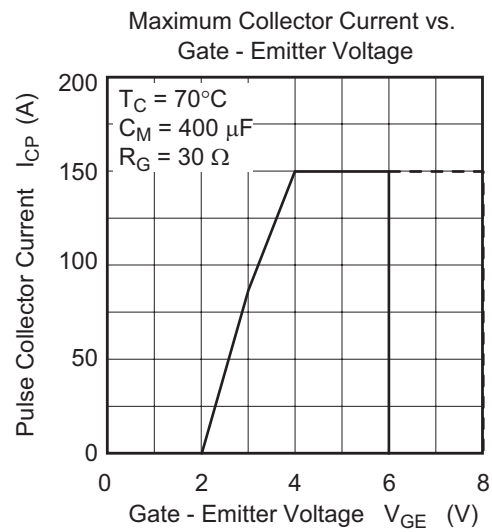
Parameter	Symbol	Ratings	Unit	Conditions
Collector-emitter voltage	V_{CES}	400	V	$V_{GE} = 0 \text{ V}$
Gate-emitter voltage	V_{GES}	± 6	V	$V_{CE} = 0 \text{ V}$
Peak gate-emitter voltage	V_{GEM}	± 8	V	$V_{CE} = 0 \text{ V}$, $t_w = 10 \text{ s}$
Collector current (Pulse)	I_{CM}	150	A	$C_M = 400 \mu\text{F}$ (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

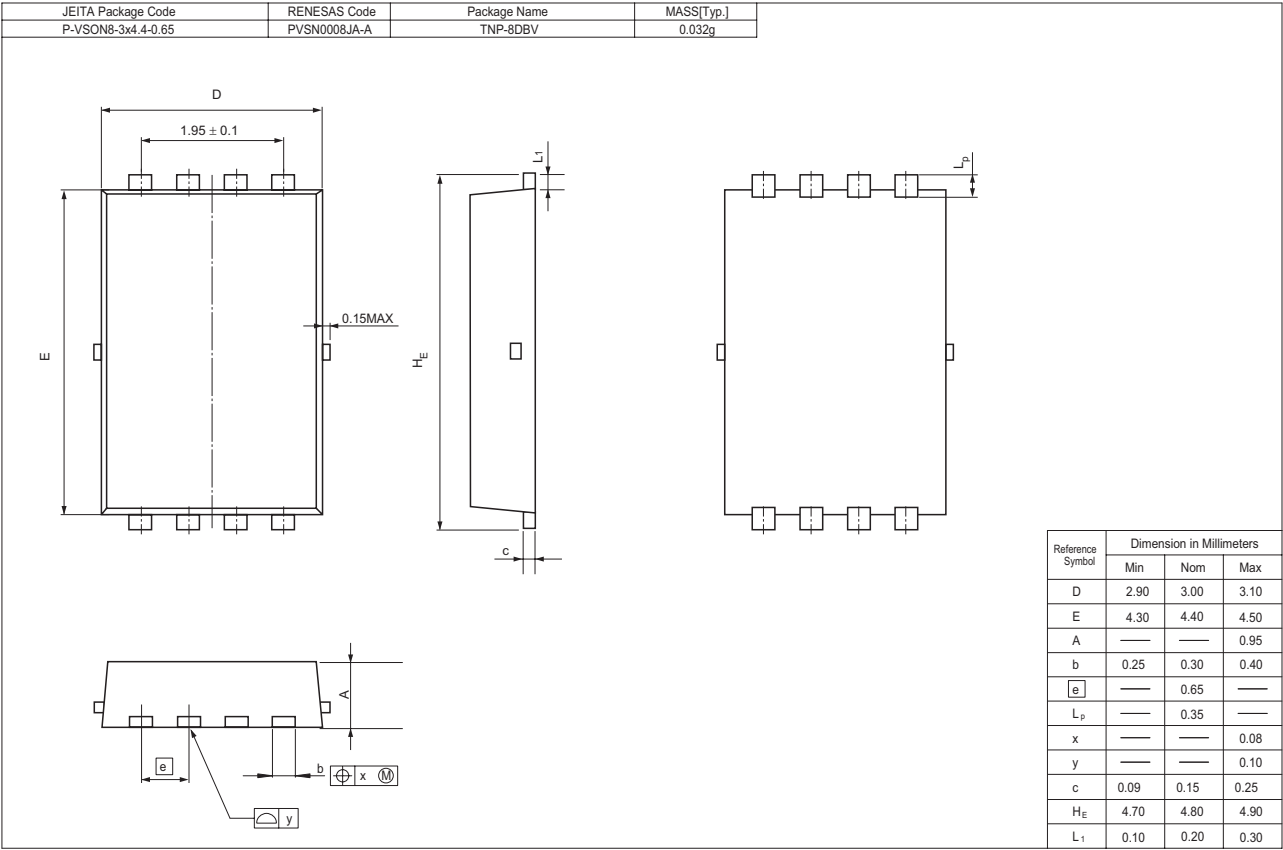
(T_j = 25°C)

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} = ±8 V, V _{CS} = 0 V
Gate-emitter threshold voltage	V _{GE(th)}	0.5	0.7	1.5	V	V _{CE} = 10 V, I _C = 1 mA
Collector-Emitter saturation voltage	V _{CE(sat)}	—	4.0	6.0	V	I _C = 150 A, V _{GE} = 4 V
Input capacitance	C _{ies}	—	3400	—	pF	V _{CE} = 25 V, V _{GE} = 10 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	CY25CAJ-8F-T13

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

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