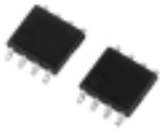


MITSUBISHI IGBT
CY25AAJ-8

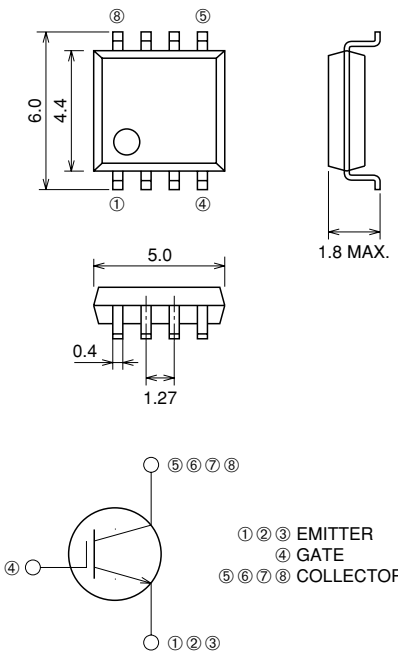
Nch IGBT for STROBE FLASHER

CY25AAJ-8



- VCES 400V
- ICM 150A
- Drive voltage 4V

OUTLINE DRAWING Dimensions in mm



① ② ③ EMITTER
 ④ GATE
 ⑤ ⑥ ⑦ ⑧ COLLECTOR

SOP-8

APPLICATION

Strobe flasher for Camera

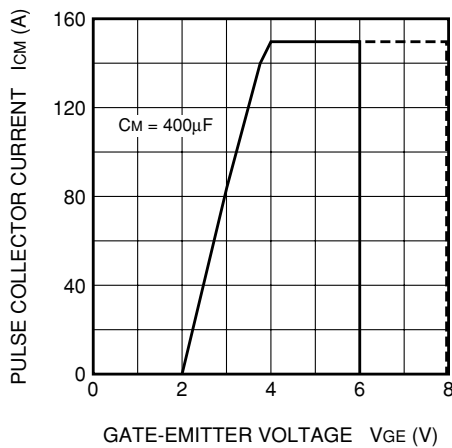
MAXIMUM RATINGS (Tc = 25°C)

Symbol	Parameter	Conditions	Ratings	Unit
V _{CES}	Collector-emitter voltage	V _{GE} = 0V	400	V
V _{GES}	Gate-emitter voltage	V _{CE} = 0V	±6	V
V _{GEM}	Peak gate-emitter voltage	V _{CE} = 0V, t _w = 10s	±8	V
I _{CM}	Collector current (Pulsed)	C _M = 400μF see figure1	150	A
T _j	Junction temperature		-40 ~ +150	°C
T _{stg}	Storage temperature		-40 ~ +150	°C

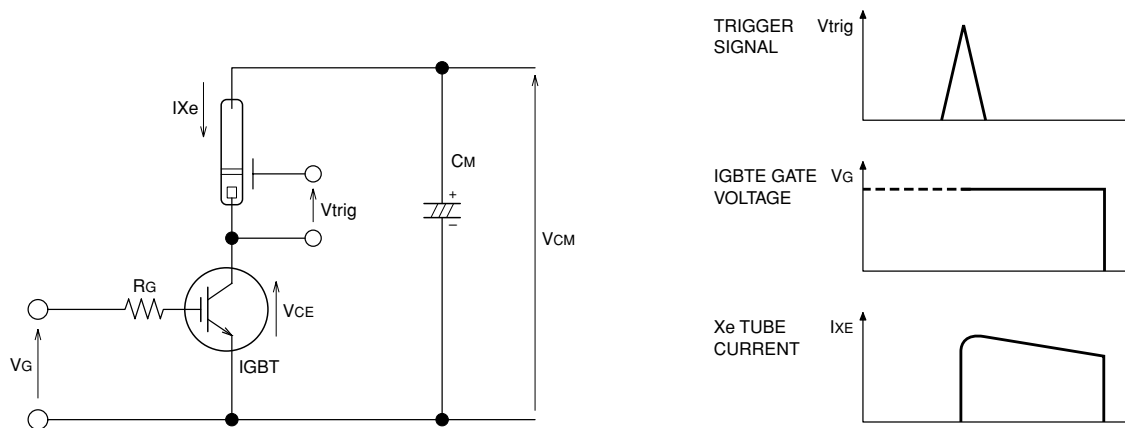
ELECTRICAL CHARACTERISTICS (T_J = 25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
V (BR) CES	Collector-emitter breakdown voltage	I _C = 1mA, V _{GE} = 0V	450	—	—	V
I _{CES}	Collector-emitter leakage current	V _{CE} = 400V, V _{GE} = 0V	—	—	10	μA
I _{GES}	Gate-emitter leakage current	V _{GE} = ±6V, V _{CE} = 0V	—	—	±0.1	μA
V _{GE (th)}	Gate-emitter threshold voltage	V _{CE} = 10V, I _C = 1mA	—	—	1.5	V

Figure1. MAXIMUM PULSE COLLECTOR CURRENT



APPLICATION EXAMPLE



Recommended operation conditions	Maximum operation conditions
V _{CM} = 330V	V _{CM} = 350V
I _{CP} = 130A	I _{CP} = 150A
C _M = 330μF	C _M = 400μF
V _{GE} = 5V	

- Notice 1. Gate drive voltage during on-state must be applied to satisfy the rating of maximum pulse collector current. And peak reverse gate current during turn-off must become less than 0.1A. (In general, when R_G (off) = 30Ω, it is satisfied.)
- Notice 2. IGBT has MOS structure and its gate is insulated by thin silicon oxide. So please handle carefully not to give static electricity.
- Notice 3. The operation life should be endured 5,000 shots under the charge current (I_{Xe} ≤ 150A : full luminescence condition) of main condenser (C_M = 400μF). Repetitive period under the full luminescence conditions is over 3 seconds.
- Notice 4. Total gate operation time must be applied within 5,000 hours.