


MITSUBISHI INSULATED GATE BIPOLAR TRANSISTOR

CT25ASJ-8

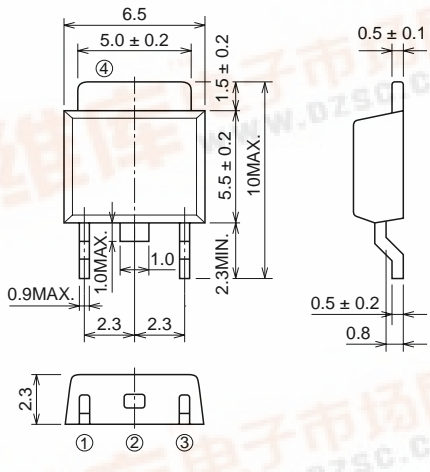
STROBE FLASHER USE

CT25ASJ-8



- VCES 400V
- ICM 150A
- Drive Voltage V_{GE}=4V
- Small Package MP-3

OUTLINE DRAWING Dimensions in mm



① GATE
② COLLECTOR
③ EMITTER
④ COLLECTOR

MP-3

APPLICATION

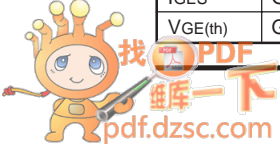
Strobe Flasher.

MAXIMUM RATINGS (T_c = 25°C)

| Symbol | Parameter | Conditions | Ratings | Unit |
|------------------|----------------------------|----------------------|------------|------|
| V _{CES} | Collector-emitter voltage | V _{GE} = 0V | 400 | V |
| V _{GES} | Gate-emitter voltage | | ±6 | V |
| V _{GEM} | Peak gate-emitter voltage | | ±8 | V |
| I _{CM} | Collector current (Pulsed) | See figure 1 | 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 |



PERFORMANCE CURVES

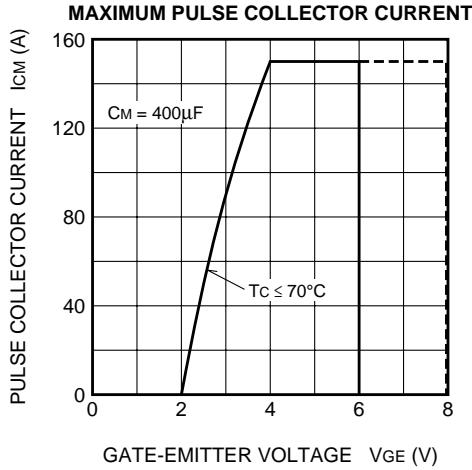
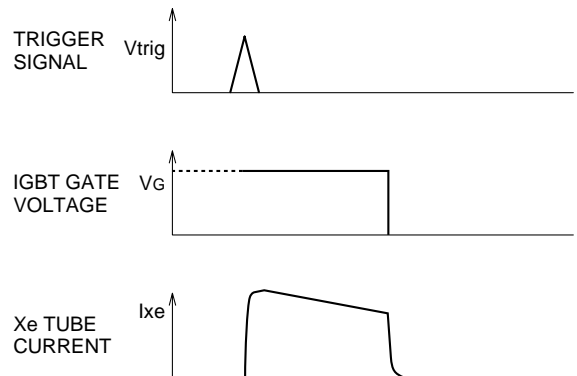
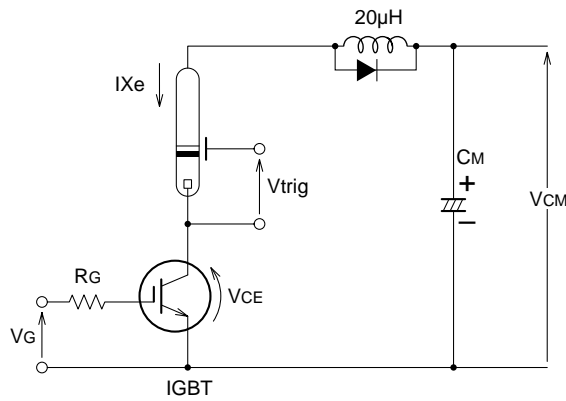


Figure 1

APPLICATION EXAMPLE



| RECOMMEND CONDITION | MAXIMUM CONDITION |
|---------------------|-------------------|
| $V_{CM} = 330V$ | 350V |
| $I_{CP} = 130A$ | 150A |
| $C_M = 330\mu F$ | 400µF |
| $V_{GE} = 5V$ | |

- Notice 1. Gate drive voltage during on-period must be applied to satisfy the rating of maximum pulse collector current. And reverse gate current during turn-off must be kept less than 0.1A. (In general, it is satisfied if $R_G \geq 30\Omega$)
- Notice 2. IGBT has MOS structure and its gate is insulated by thin silicon oxide. So please handle carefully not to suffer from electrostatic charge.
- Notice 3. The operation life should be endured 5,000 shots under the charge current ($I_{Xe} \leq 150A$: full luminescence condition) of main condenser ($C_M=400\mu F$). Repetition period under full luminescence condition is over 3 seconds.
- Notice 4. Total operation hours must be applied within 5,000 hours.