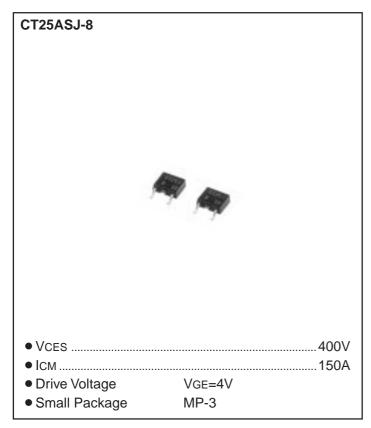
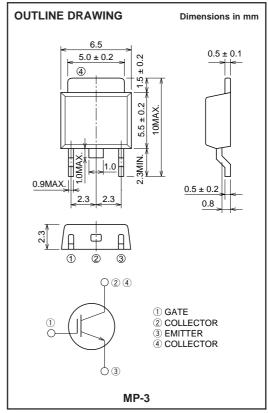
## MITSUBISHI INSULATED GATE BIPOLAR TRANSISTOR

# CT25ASJ-8

STROBE FLASHER USE





## **APPLICATION**

Strobe Flasher.

### MAXIMUM RATINGS (Tc = 25°C)

Symbol	Parameter	Conditions	Ratings	Unit
VCES	Collector-emitter voltage	VGE = 0V	400	V
VGES	Gate-emitter voltage		±6	V
VGEM	Peak gate-emitter voltage		±8	V
Ісм	Collector current (Pulsed)	See figure 1	150	Α
Tj	Junction temperature		-40 ~ <b>+</b> 150	°C
Tstg	Storage temperature		−40 ~ <b>+</b> 150	°C

## **ELECTRICAL CHARACTERISTICS** (Tj = 25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Тур.	Max.	Offit
V(BR)CES	Collector-emitter breakdown voltage	IC = 1mA, VGE = 0V	450	_	_	V
ICES	Collector-emitter leakage current	VCE = 400V, VGE = 0V	_	_	10	μΑ
IGES	Gate-emitter leakage current	$VGE = \pm 6V$ , $VCE = 0V$	_	_	±0.1	μΑ
VGE(th)	Gate-emitter threshold voltage	VCE = 10V, IC = 1mA	_	_	1.5	V



Feb.1999

#### **PERFORMANCE CURVES**

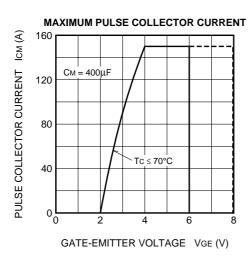
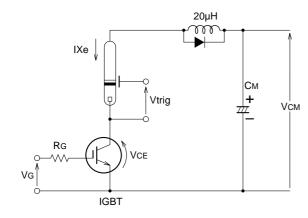
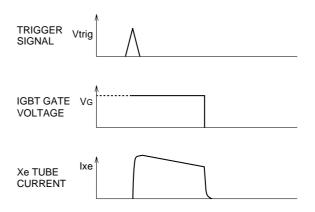


Figure 1

#### **APPLICATION EXAMPLE**





## RECOMMEND CONDITION

## MAXIMUM CONDITION

 $\begin{array}{lll} \text{VCM} = 330 \text{V} & 350 \text{V} \\ \text{ICP} = 130 \text{A} & 150 \text{A} \\ \text{CM} = 330 \mu \text{F} & 400 \mu \text{F} \\ \text{VGE} = 5 \text{V} & \end{array}$ 

- 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  $Rg \ge 30\Omega$ )
- 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 (lxe  $\leq$  150A : full luminescence condition) of main condenser (CM=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.

