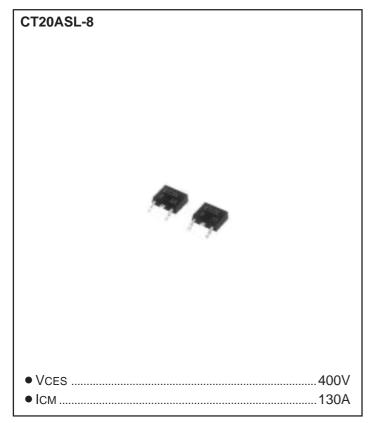
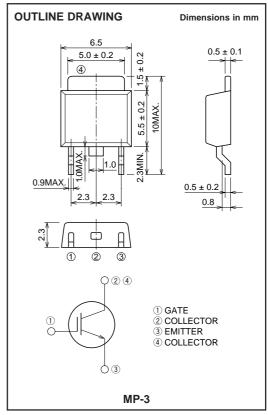
# MITSUBISHI INSULATED GATE BIPOLAR TRANSISTOR

# CT20ASL-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	VCE = 0V, See notice 4	±15	V
VGEM	Peak gate-emitter voltage	VCE = 0V, tw = 10s	±16	V
Ісм	Collector current (Pulsed)	See figure 1	130	Α
Tj	Junction temperature		-40 ~ <b>+</b> 150	°C
Tstg	Storage temperature		-40 ~ +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 = ±16V, VCE = 0V	_	_	±0.1	μΑ
VGE(th)	Gate-emitter threshold voltage	VCE = 10V, IC = 1mA	0.5	_	4.0	V



Feb.1999

### **PERFORMANCE CURVES**

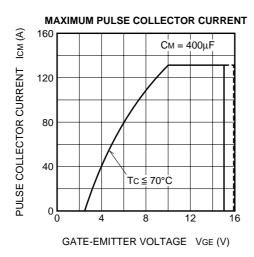
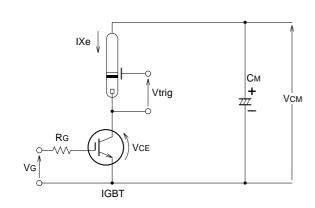
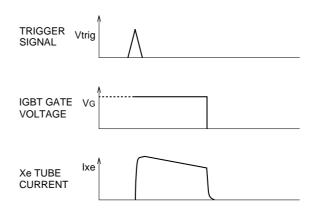


Figure 1

### **APPLICATION EXAMPLE**





## RECOMMEND CONDITION MAXIMUM CONDITION

 $\begin{array}{lll} \text{VCM} = 300 \text{V} & 350 \text{V} \\ \text{IP} = 120 \text{A} & 130 \text{A} \\ \text{CM} = 300 \mu \text{F} & 400 \mu \text{F} \\ \text{VGE} = 12 \text{V} & \end{array}$ 

- 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 50mA. (In general, it is satisfied if  $Rg \ge 330\Omega$ )
- 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  $\leq$  130A : 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.

