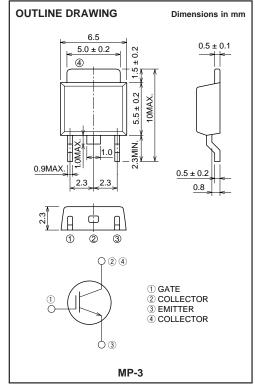
MITSUBISHI INSULATED GATE BIPOLAR TRANSISTOR

CT20AS-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	±30	V
VGEM	Peak gate-emitter voltage	VCE = 0V, tw = 0.5s	±40	V
Ісм	Collector current (Pulsed)	See figure 1	130	Α
Tj	Junction temperature		-40 ~ + 150	°C
Tstg	Storage temperature		-40 ~ + 150	°C

ELECTRICAL CHARACTERISTICS (Tj = 25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Тур.	Max.	Offic
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	$VGE = \pm 40V, VCE = 0V$	_	_	±0.1	μΑ
VGE(th)	Gate-emitter threshold voltage	VCE = 10V, IC = 1mA	_	_	7.0	V



Feb.1999

PERFORMANCE CURVES

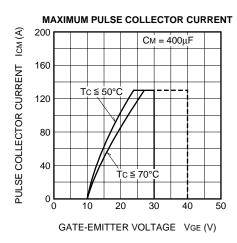
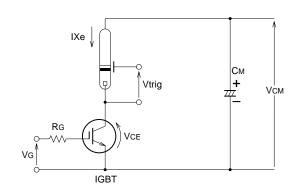
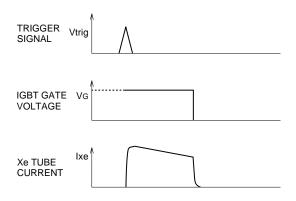


Figure 1

APPLICATION EXAMPLE





RECOMMEND CONDITION MAXIMUM CONDITION

 $\begin{array}{lll} \text{VCM} = 330 \text{V} & 360 \text{V} \\ \text{IP} = 120 \text{A} & 130 \text{A} \\ \text{CM} = 300 \mu \text{F} & 400 \mu \text{F} \\ \text{VGE} = 28 \text{V} & \end{array}$

- 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 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 (Ixe \leq 130A : full luminescence condition) of main condenser (CM=400 μ F). Repetition period under full luminescence condition is over 3 seconds.
- Notice 4. Total operation hours must be applied within 5,000 hours.

