

STROBO FLASH APPLICATION.
HIGH CURRENT APPLICATION.

FEATURES

- High DC Current Gain and Excellent h_{FE} Linearity
: $h_{FE}(1)=140\sim600$ ($V_{CE}=1V$, $I_C=0.5A$)
: $h_{FE}(2)=70(\text{Min.}), 200(\text{Typ.})$ ($V_{CE}=1V$, $I_C=2A$).
- Low Saturation Voltage
: $V_{CE(sat)}=0.5V(\text{Max.})$ ($I_C=2A$, $I_B=50mA$).

MAXIMUM RATINGS ($T_a=25^\circ C$)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	30	V
Collector Emitter Voltage		V_{CES}	30	V
		V_{CEO}	10	
Emitter Base Voltage		V_{EBO}	6	V
Collector Current	DC	I_C	2	A
	Pulse (Note1)	I_{CP}	5	
Base Current		I_B	2	A
Collector Power Dissipation		P_C	1	W
Junction Temperature		T_j	150	$^\circ C$
Storage Temperature Range		T_{stg}	$-55\sim150$	$^\circ C$

Note 1 : Pulse Width $\leq 10ms$, Duty Cycle $\leq 30\%$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=30V$, $I_E=0$	–	–	100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=6V$, $I_C=0$	–	–	100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA$, $I_B=0$	10	–	–	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-1mA$, $I_C=0$	6	–	–	V
DC Current Gain	$h_{FE}(1)$ (Note 2)	$V_{CE}=1V$, $I_C=0.5A$	140	–	600	
	$h_{FE}(2)$	$V_{CE}=1V$, $I_C=2A$	70	200	–	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2A$, $I_B=50mA$	–	0.2	0.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=1V$, $I_C=2A$	–	0.86	1.5	V
Transition Frequency	f_T	$V_{CE}=1V$, $I_C=0.5A$	–	150	–	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$, $I_E=0$, $f=1MHz$	–	27	–	pF

Note 2 : $h_{FE}(1)$ Classification A:140~240, B:200~330, C:300~450, D:420~600



