

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 ($T_a=25^\circ\text{C}$)

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	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55~150	$^\circ\text{C}$

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

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

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	
		$V_{CE}=1V, I_C=2A$	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}	$V_{CB}=10V, I_E=0, f=1\text{MHz}$	-	27	-	pF

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



