

DARLINGTON TRANSISTOR.
SOLENOID DRIVER. MOTOR DRIVER.

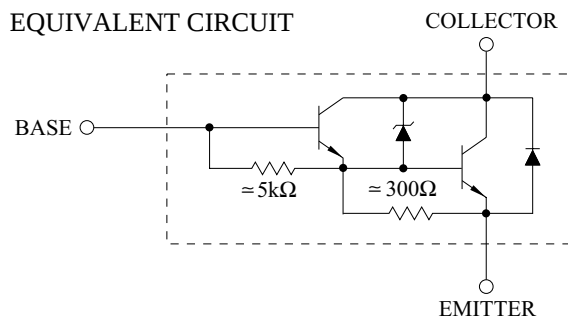
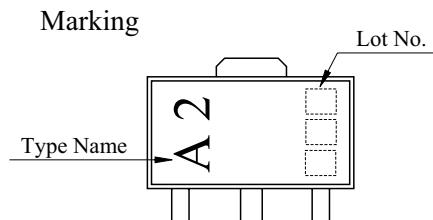
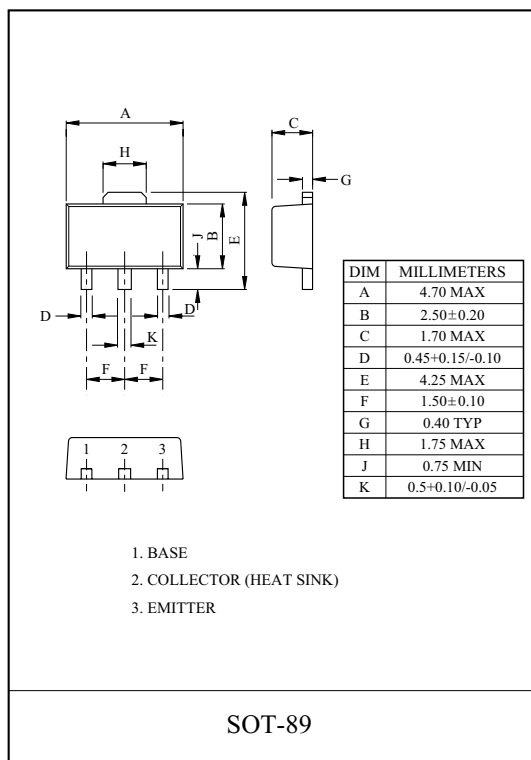
FEATURES

- High DC Current Gain
: $h_{FE}=2000(\text{Min.})$ ($V_{CE}=2V$, $I_C=1A$)

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	50	V
Collector-Emitter Voltage		V_{CEO}	60 ± 10	V
Emitter-Base Voltage		V_{EBO}	8	V
Collector Current	DC	I_C	1	A
	Pulse	I_{CP}	3	
Base Current		I_B	0.5	A
Collector Power Dissipation	$t=10S$	P_C *	2.5	W
	DC		1	
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	$-55 \sim 150$	$^\circ\text{C}$

* P_C : Package mounted on FR4 board (Cu area : 645mm^2 , glass epoxy, $t=1.6\text{mm}$)



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

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=45V$, $I_E=0$	-	-	10	μA
		I_{CEO}	$V_{CE}=45V$, $I_B=0$	-	-	10	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=8V$, $I_C=0$	0.8	-	4	mA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=10\text{mA}$, $I_B=0$	50	60	70	V
DC Current Gain		h_{FE}	$V_{CE}=2V$, $I_C=1A$	2000	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)1}$	$I_C=0.5A$, $I_B=1\text{mA}$	-	-	1.2	V
		$V_{CE(sat)2}$	$I_C=1A$, $I_B=1\text{mA}$	-	-	1.5	
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=1A$, $I_B=1\text{mA}$	-	-	2.0	V
Switching Time	Turn On Time	t_{on}		-	0.4	-	μs
	Storage Time	t_{stg}		-	4.0	-	
	Fall Time	t_f		-	0.6	-	

