

DARLINGTON TRANSISTOR.  
SOLENOID DRIVER. MOTOR DRIVER.

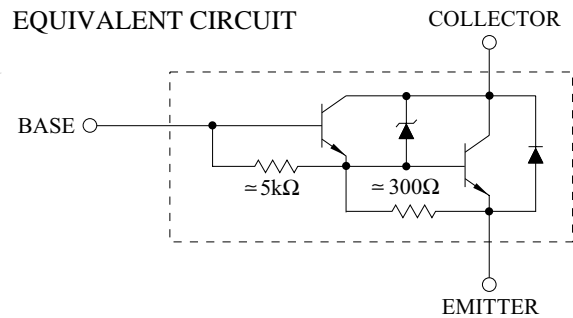
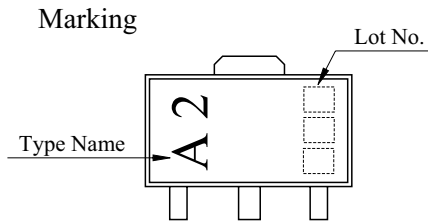
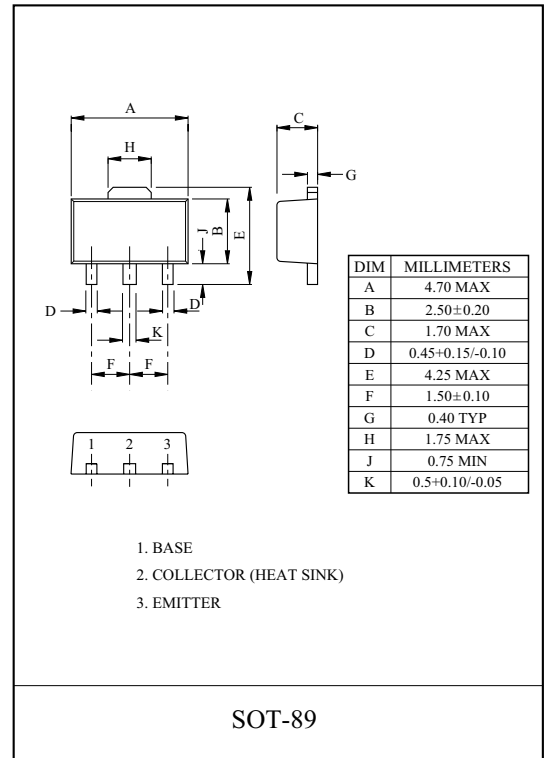
### FEATURES

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

### MAXIMUM RATINGS (Ta=25 °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	°C
Storage Temperature Range		$T_{stg}$	-55 ~ 150	°C

\*  $P_c$  : Package mounted on FR4 board (Cu area : 645mm<sup>2</sup>, glass epoxy, t=1.6mm)



### ELECTRICAL CHARACTERISTICS (Ta=25 °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		$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	50	60	70	V
DC Current Gain		$h_{FE}$	$V_{CE}=2V, I_C=1A$	2000	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)1}$	$I_C=0.5A, I_B=1mA$	-	-	1.2	V
		$V_{CE(sat)2}$	$I_C=1A, I_B=1mA$	-	-	1.5	
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=1A, I_B=1mA$	-	-	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	

