

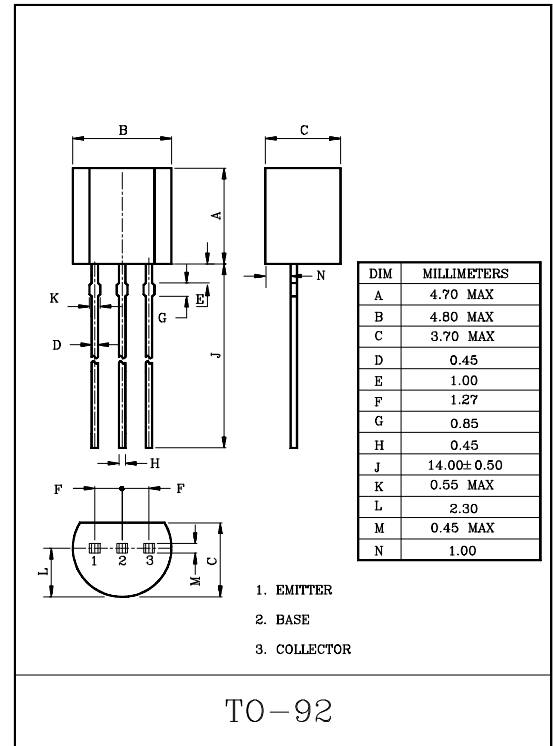
HIGH CURRENT APPLICATION.

FEATURE

- Complementary to MPS8550.

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	1.5	A
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=35V, I_E=0$	—	—	100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=6V, I_C=0$	—	—	100	nA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	40	—	—	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=2mA, I_B=0$	25	—	—	V
DC Current Gain	$h_{FE}(1)$	$V_{CE}=1V, I_C=5mA$	45	135	—	
	$h_{FE}(2)$ (Note)	$V_{CE}=1V, I_C=100mA$	85	160	300	
	$h_{FE}(3)$	$V_{CE}=1V, I_C=800mA$	40	110	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=800mA, I_B=80mA$	—	0.28	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=800mA, I_B=80mA$	—	0.98	1.2	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=1V, I_C=10mA$	—	0.66	1.0	V
Transition Frequency	f_T	$V_{CE}=10V, I_C=50mA$	100	190	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, f=1MHz, I_E=0$	—	9	—	pF

Note : $h_{FE}(2)$ Classification B:85~160 , C : 120~200 , D : 160~300

MPS8050

