

HIGH VOLTAGE APPLICATION

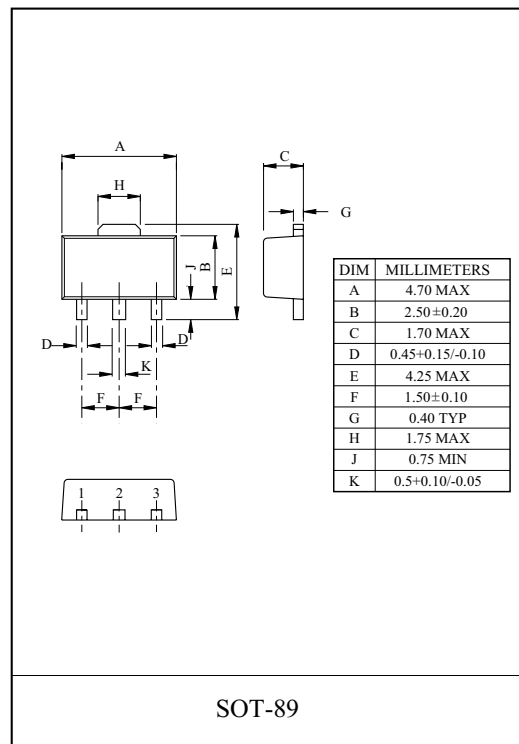
FEATURES

- High Voltage : $V_{CEO}=160V$.
- Large Continuous Collector Current Capability.
- Recommended for LED Drive Application.

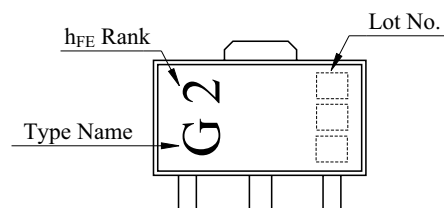
MAXIMUM RATING (Ta=25)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	160	V
Collector-Emitter Voltage	V_{CEO}	160	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	1	A
Base Current	I_B	0.5	A
Collector Power Dissipation	P_C	0.5	W
	P_C^*	1	
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

* : Mounted on ceramic substrate (250mm² × 0.8t)



Marking



ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=160V, I_E=0$	-	-	1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=6V, I_C=0$	-	-	1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	160	-	-	V
DC Current Gain	h_{FE} (Note)	$V_{CE}=5V, I_C=200mA$	160	-	320	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=100mA, I_B=10mA$	-	0.05	0.1	V
	$V_{CE(sat)(2)}$	$I_C=500mA, I_B=50mA$	-	-	1.5	V
	$V_{CE(sat)(3)}$	$I_C=120mA, I_B=2mA$	-	0.13	-	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5V, I_C=5mA$	0.45	-	0.75	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=200mA$	-	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	15	-	pF

KTC4380

