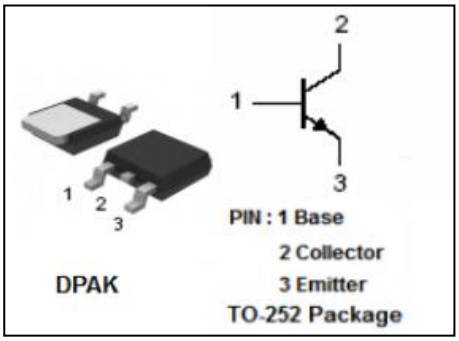
isc Silicon NPN Power Transistor — 2SC6082

DESCRIPTION

- Large current capacitance
- High speed switching
- Low saturation voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

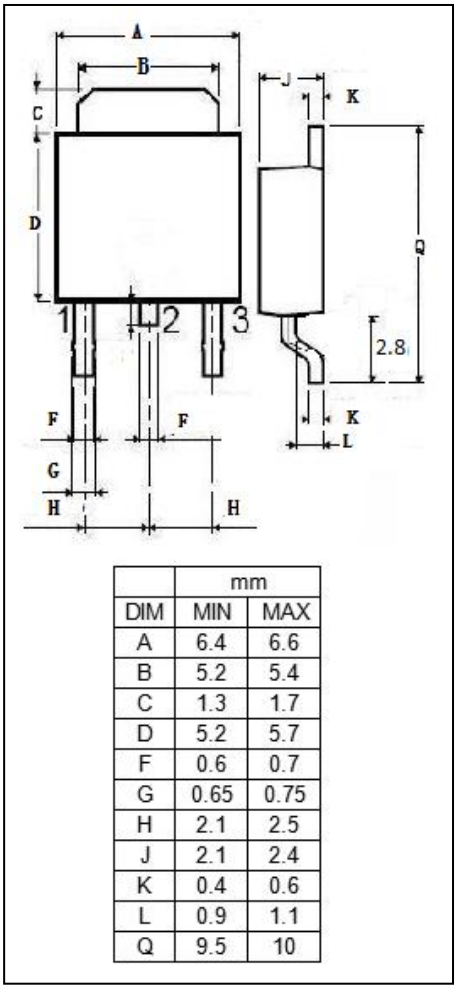


APPLICATIONS

- High speed switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current- Continuous	15	A
I_B	Base Current- Continuous	3	A
I_{CP}	Collector Current-Pulse	20	A
P_C	Collector Power Dissipation @ T_a=25℃	2	W
	Collector Power Dissipation @ T_C=25℃	23	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



	mm	
DIM	MIN	MAX
A	6.4	6.6
B	5.2	5.4
C	1.3	1.7
D	5.2	5.7
F	0.6	0.7
G	0.65	0.75
H	2.1	2.5
J	2.1	2.4
K	0.4	0.6
L	0.9	1.1
Q	9.5	10

isc Silicon NPN Power Transistor 2SC6082

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 7.5A; I_B= 0.375A			0.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 7.5A; I_B= 0.375A			1.2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 40V; I_E= 0			10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C= 0			10	μA
h_{FE-1}	DC Current Gain	I_C= 330mA; V_{CE}= 2V	200		560	
h_{FE-2}	DC Current Gain	I_C= 10A; V_{CE}= 2V	50			