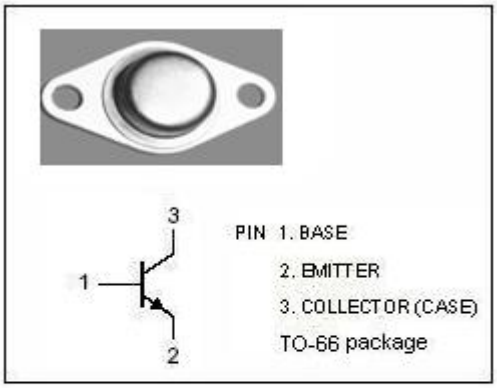
isc Silicon NPN Power Transistor 2SD237

DESCRIPTION

- Excellent Safe Operating Area
- Low Collector-Emitter Saturation Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

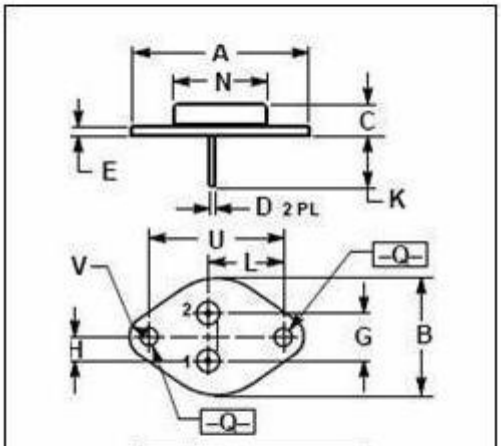


APPLICATIONS

- Designed for general-purpose power amplifier and switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	1.5	A
I_{CM}	Collector Current-Peak	2	A
P_C	Collector Power Dissipation@T_C=25℃	15	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65~150	℃



DIM	mm MIN	MAX
A	31.40	31.80
B	17.30	17.90
C	6.70	7.10
D	0.70	0.90
E	1.40	1.80
G	5.08	
H	2.54	
K	9.80	10.50
L	14.70	14.90
N	12.40	12.70
Q	3.60	3.80
U	24.30	24.50
V	3.50	3.70

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$*	Collector-Emitter Sustaining Voltage	I_C=30mA; I_B= 0	80		V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 1mA; I_C= 0	8		V
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0		0.1	mA
I_{CBO}	Collector Base Cutoff Current	V_{CB}=80V; I_E= 0		0.1	mA
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 1A; I_B= 0.1A		0.7	V
$V_{BE(ON)}$	Base-Emitter On Voltage	I_C=1A;V_{CE}= 4V		1.4	V
h_{FE-1}*	DC Current Gain	I_C= 0.5A; V_{CE}= 4V	60	200	
h_{FE-2}*	DC Current Gain	I_C= 1A; V_{CE}= 4V	20		

*:Pulse test:Pulse width=300us,duty cycle≤2%