

isc Silicon NPN Power Transistor

2SD641

DESCRIPTION

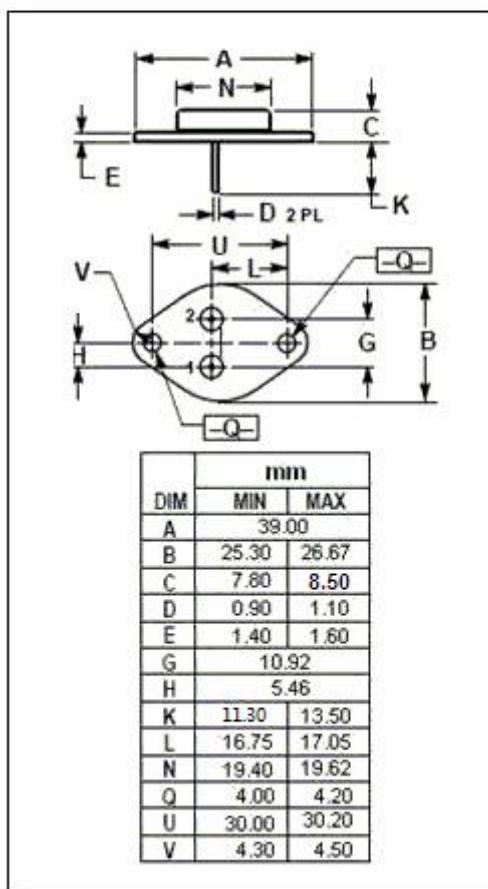
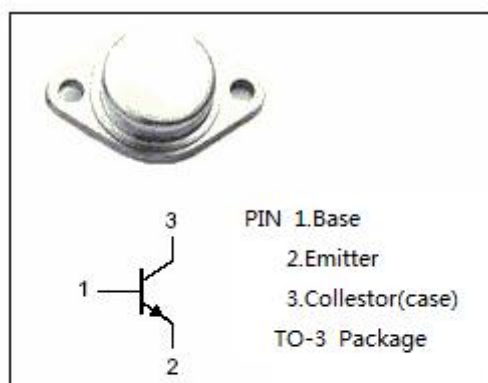
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 400V$ (Min)
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 1.5V$ (Max.)@ $I_C = 10A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High voltage switching applications.
- High power amplifier applications.

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ C$)

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	600	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	15	A
I_B	Base Current-Continuous	5	A
P_C	Collector Power Dissipation @ $T_c = 25^\circ C$	150	W
T_j	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-65~150	$^\circ C$



isc Silicon NPN Power Transistor**2SD641****ELECTRICAL CHARACTERISTICS** $T_c=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=20\text{mA}; I_B=0$	400			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=10\text{A}; I_B=2\text{A}$			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=10\text{A}; I_B=2\text{A}$			2.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=500\text{V}; I_E=0$			0.5	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			1.0	mA
h_{FE}	DC Current Gain	$I_C=5\text{A}; V_{CE}=5\text{V}$	20		140	

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