

isc Silicon PNP Power Transistors

3CD9F

DESCRIPTION

- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -1.5V(\text{Max.}) @ I_C = -7.5A$
- DC Current Gain-
: $h_{FE} = 15-120 @ I_C = -7.5A, V_{CE} = -5V$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

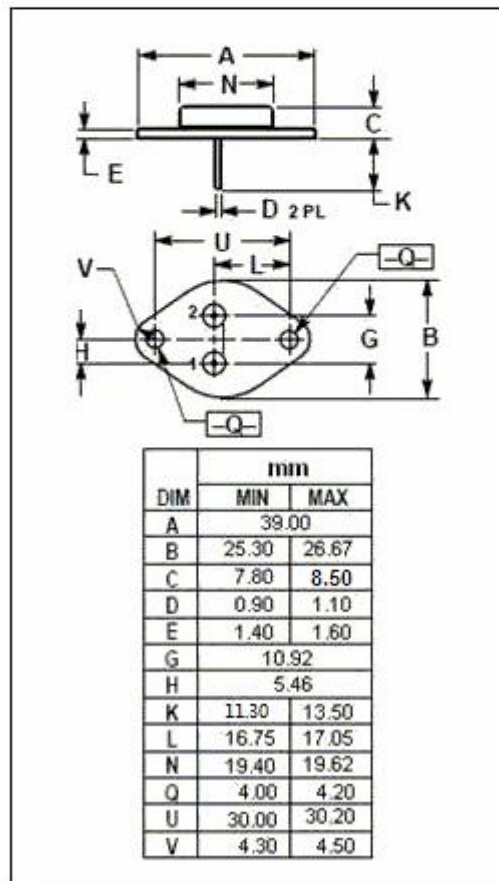
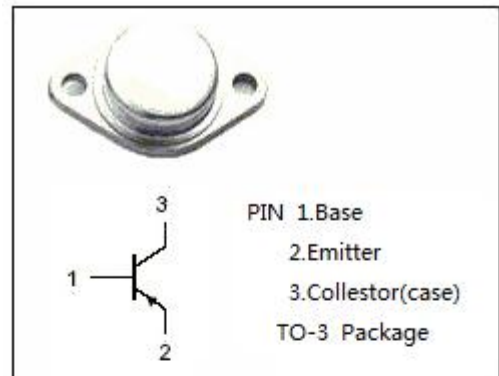
- Designed for general-purpose power amplifier and switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-300	V
V_{CEO}	Collector-Emitter Voltage	-300	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-15	A
P_C	Collector Power Dissipation	150	W
T_J	Junction Temperature	175	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~175	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.66	$^\circ\text{C/W}$



isc Silicon PNP Power Transistors**3CD9F****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(BR)}$	Collector-Emitter Breakdown Voltage	$I_C=-5\text{mA}$; $I_B=0$	-300		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=-7.5\text{A}$; $I_B=0.75\text{A}$		-1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=-7.5\text{A}$; $I_B=0.75\text{A}$		-1.8	V
I_{CEO}	Collector Cutoff Current	$V_{CE}=-300\text{V}$; $I_B=0$		-2.0	mA
I_{CBO}	Collector Cutoff Current	$V_{CB}=-300\text{V}$; $I_E=0$		-1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=-5\text{V}$; $I_C=0$		-1.0	mA
h_{FE}	DC Current Gain	$I_C=-7.5\text{A}$; $V_{CE}=-5\text{V}$	15	120	

NOTICE:

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