

isc Silicon PNP Power Transistor

3CD834

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -60V(\text{Min})$
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = -1.0V(\text{Max}) @ I_C = -3.0A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

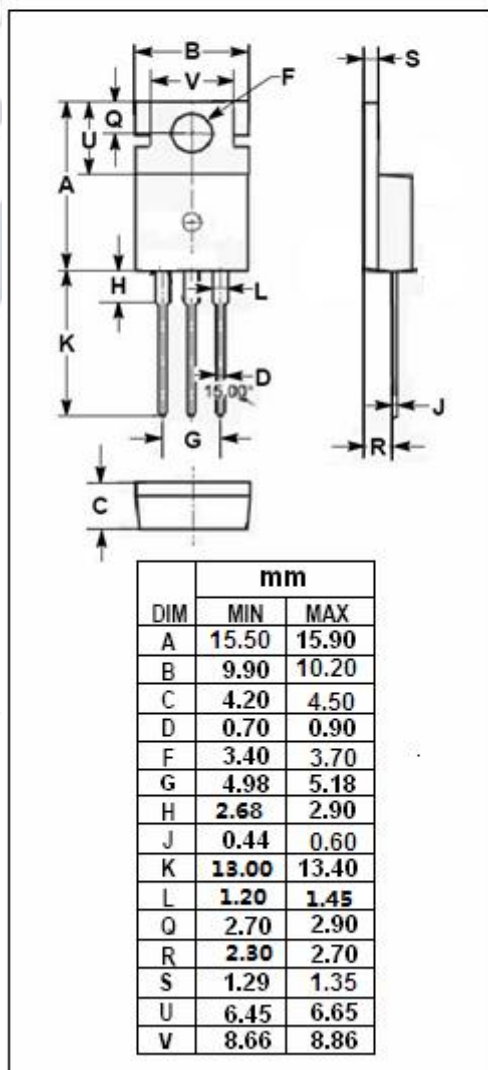
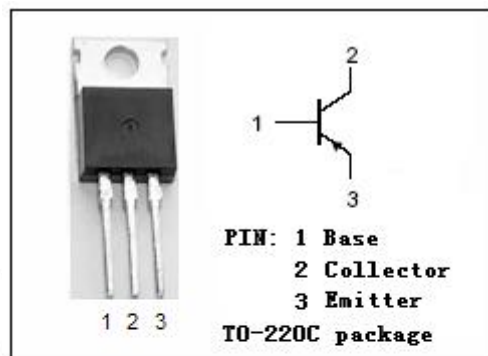
- Designed for use in audio frequency power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-3.0	A
I_B	Base Current-Continuous	-0.5	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	30	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{th-j-c}	Thermal Resistance, Junction to Case	4.16	$^\circ\text{C/W}$



isc Silicon PNP Power Transistor**3CD834****ELECTRICAL CHARACTERISTICS****T_C=25℃ unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -50mA; I _B = 0	-60			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -3.0A; I _B = -0.3A			-1.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -0.5A; V _{CE} = -5V			-1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -60V; I _E = 0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -7V; I _C = 0			-100	μ A
h _{FE}	DC Current Gain	I _C = -500mA; V _{CE} = -5V	60		200	
C _{OB}	Collector Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1MHz		150		pF
f _T	Current-Gain—Bandwidth Product	I _C = -0.5A; V _{CE} = -5V		9		MHz

Switching times

t _{on}	Turn-on Time	I _C = -2A, I _{B1} = -I _{B2} = -0.2A R _L = 15 Ω; V _{CC} = -30V		0.4		μ s
t _{stg}	Storage Time			1.7		μ s
t _f	Fall Time			0.5		μ s

◆ h_{FE} Classifications

O	Y
60-120	100-200

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