

isc Silicon NPN Power Transistor
BD207
DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CE0} = 60V$ (Min.)
- High Reliability
- Low Collector Saturation Voltage--
- Minimum Lot-to-Lot variations for robust device performance and reliable operation--

APPLICATIONS

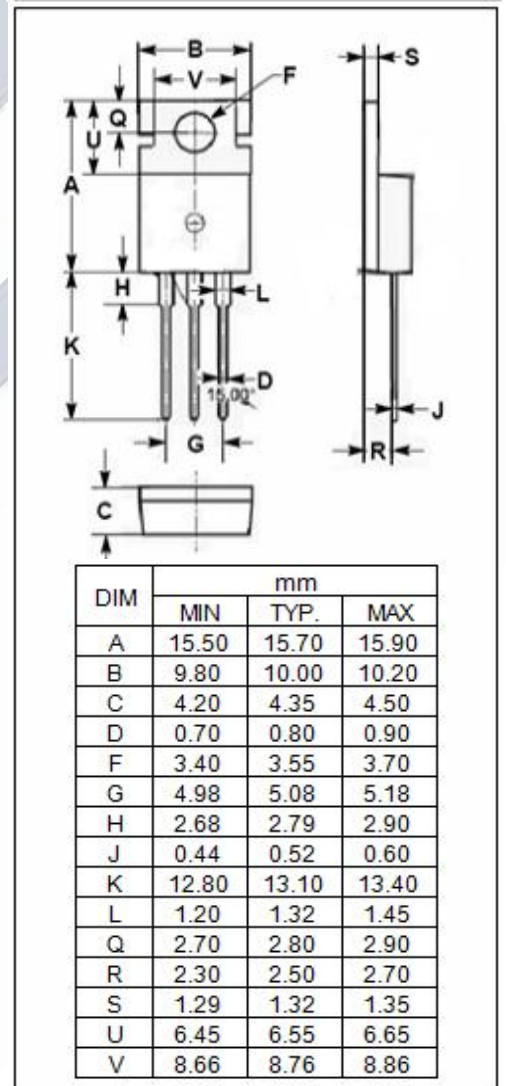
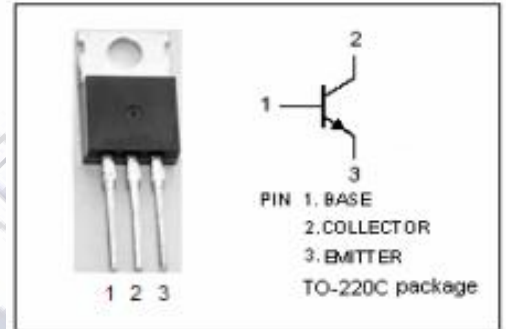
- High ruggedness electronic ignitions
- High voltage ignition coil driver

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	70	V
V_{CEO}	Collector-Emitter peak Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	10	A
I_B	Base Current-Continuous	6	A
P_T	Total Power Dissipation @ $T_a=25^{\circ}C$	90	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55~150	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.39	$^{\circ}C/W$



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ELECTRICAL CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-Emitter Sustaining Voltage	I _c =0.2mA, I _b =0	60	--	--	V
I _{CBO}	Collector Cutoff Current	V _{CE} = 70V; I _b =0	--	--	1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _c = 0	--	--	2.0	mA
h _{FE-1}	DC Current Gain	I _c =2A; V _{CE} = 2V	30	--	--	--
h _{FE-2}	DC Current Gain	I _c =4A; V _{CE} = 2V	15	--	--	--
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _c = 4A; I _B = 0.4A	--	--	1.1	V
V _{BE(on)}	Base-Emitter on Voltage	I _c = 4A; V _{CE} = 2V	--	--	1.6	V

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