

isc Silicon NPN Power Transistor

T06

DESCRIPTION

- High Voltage: $V_{CBO} = 400V(\text{Min.})$
- Fast Switching Speed-
: $t_f = 750ns(\text{Max})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = 1.0V(\text{Max}) @ I_C = 5A$

APPLICATIONS

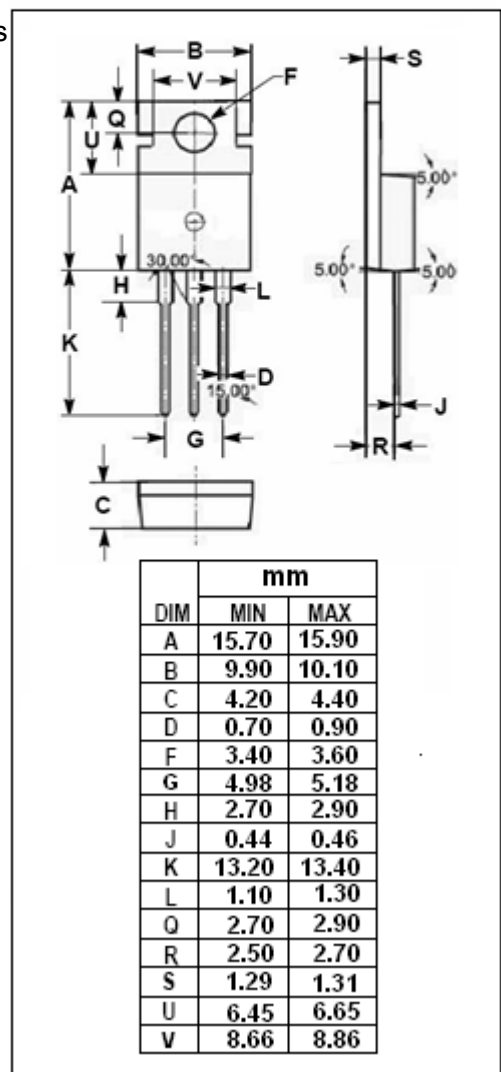
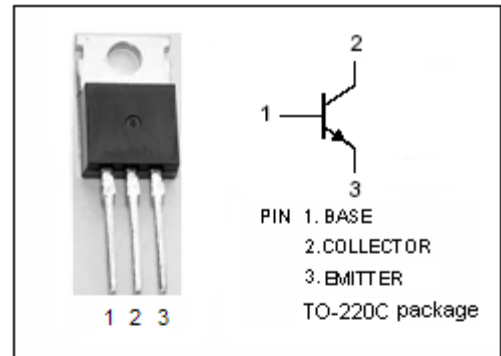
- Switching for dynamotor excitation
- For use in horizontal deflection output stage of TV's and CTV's circuits.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	400	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	7	A
I_{CM}	Collector Current-Peak	10	A
I_B	Base Current	4	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	60	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-65~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.08	$^\circ C/W$



isc Silicon NPN Power Transistor**T06****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C= 50\text{mA}; I_B= 0$	200			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 5\text{A}; I_B= 0.5\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 5\text{A}; I_B= 0.5\text{A}$			1.2	V
I_{CBO}	Collector Cutoff Current	$V_{CB}= 400\text{V}; I_E= 0$			0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 6\text{V}; I_C=0$			0.1	mA
h_{FE}	DC Current Gain	$I_C= 1\text{A}; V_{CE}= 5\text{V}$	80		160	
f_T	Current-Gain—Bandwidth Product	$I_C= 0.5\text{A}; V_{CE}= 10\text{V}; f= 1.0\text{MHz}$	10			MHz
t_f	Fall Time	$I_C= 5\text{A}; I_{B1}= -I_{B2}= 0.6\text{A}, L= 150\ \mu\text{H}$ $V_{CC}= 40\text{V}$			0.75	μs

