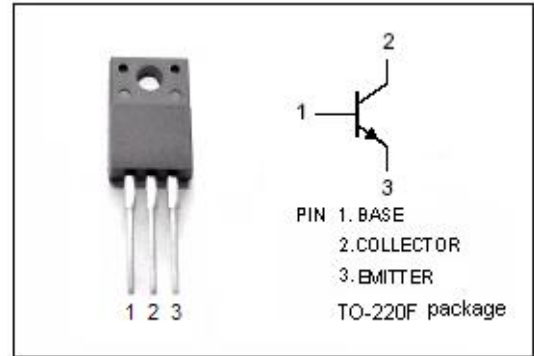


DESCRIPTION

- Low Collector Saturation Voltage
: $V_{CE(sat)} = 0.35V(\text{Max}) @ I_C = 6A$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 50V (\text{Min})$
- Complement to Type 2SA1567

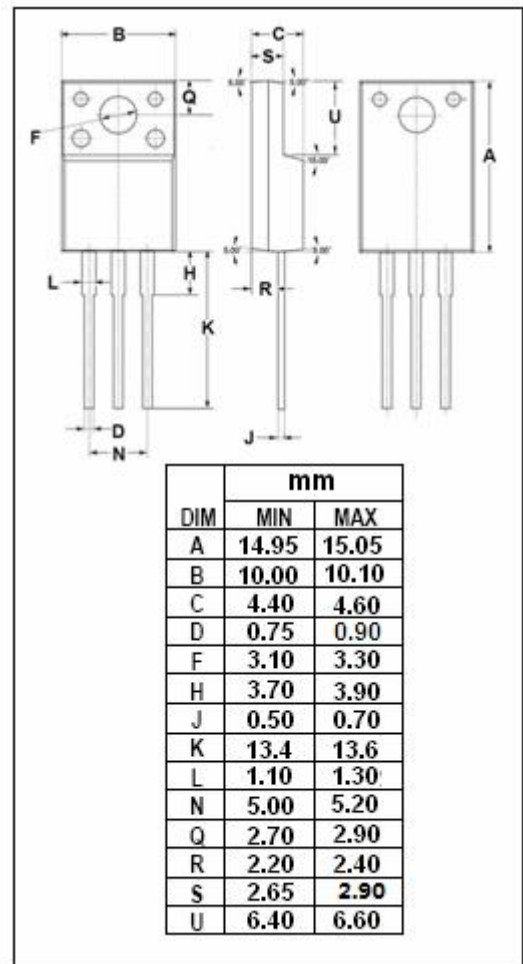
APPLICATIONS

- Designed for use in DC motor driver and general purpose applications



ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	12	A
I_B	Base Current-Continuous	3	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	35	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C



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	$I_C= 25\text{mA} ; I_B= 0$	50			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 6\text{A} ; I_B= 0.3\text{A}$			0.35	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=50\text{V} ; I_E= 0$			100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 6\text{V} ; I_C= 0$			10	μA
h_{FE}	DC Current Gain	$I_C= 6\text{A} ; V_{CE}= 1\text{V}$	50			
f_T	Current-Gain—Bandwidth Product	$I_E= -0.5\text{A} ; V_{CE}= 12\text{V}$		40		MHz
C_{OB}	Output Capacitance	$I_E= 0 ; V_{CB}= 12\text{V} ; f_{test}= 1.0\text{MHz}$		180		pF

Switching times

t_{on}	Turn-on Time	$I_C= 6\text{A} ; I_{B1}= -I_{B2}= 0.12\text{A}$ $R_L= 4\ \Omega ; V_{CC}= 24\text{V}$		0.6		μs
t_{stg}	Storage Time			1.4		μs
t_f	Fall Time			0.4		μs