

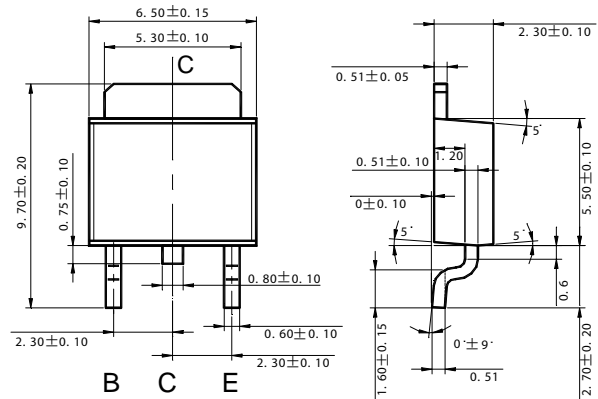
RoHS Compliant Product

TO-252

FEATURES

- Large current capacitance
- Low collector-to-emitter saturation voltage
- High-speed switching
- High allowable power dissipation

MARKING : 5706
(With Date Code)



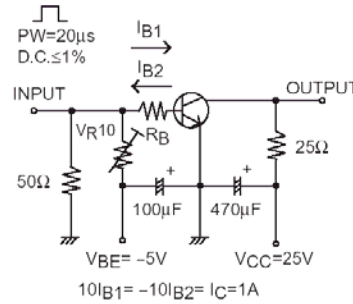
MAXIMUM RATINGS* T_A=25°C unless otherwise noted

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V _{CB0}	80	V
Collector-Emitter Voltage	V _{CES}	80	V
Collector-Emitter Voltage	V _{CEO}	50	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current	I _{CBO}	5	A
Collector Current (Pulse)	I _{CP}	7.5	A
Base Current	I _B	1.2	A
Junction Temperature	T _j	+150	°C
Storage Temperature	T _{STG}	-55~+150	°C
Total Power Dissipation	P _D	0.8	W
	P _D (T _C =25°C)	15	W

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ.	Max	Unit.	Test Conditions
Collector-Base Breakdown Voltage	BV _{CB0}	80	-	-	V	I _C =10μA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CES}	80	-	-	V	I _C =100μA, R _{BE} =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	50	-	-	V	I _C =1mA, R _{BE} =∞
Emitter-Base Breakdown Voltage	BV _{EBO}	6	-	-	V	I _E =10μA, I _C =0
Collector-Base Cutoff Current	I _{CBO}	-	-	1	μA	V _{CB} =40V, I _E =0
Emitter-Base Cutoff Current	I _{EBO}	-	-	1	μA	V _{EB} =4V, I _C =0
Collector Saturation Voltage 1	*V _{CE(sat)1}	-	-	135	mV	I _C =1A, I _B =50mA
Collector Saturation Voltage 2	*V _{CE(sat)2}	-	-	240	mV	I _C =2A, I _B =100mA
Base Saturation Voltage	*V _{BE(sat)}	-	-	1.2	V	I _C =2A, I _B =100mA
DC Current Gain	*h _{FE}	200	-	560		V _{CE} =2V, I _C =500mA
Gain-Bandwidth Product	f _T	-	400	-	MHz	V _{CE} =10V, I _C =500mA
Output Capacitance	C _{ob}	-	15	-	pF	V _{CB} =10V, f=1MHz
Turn-On Time	t _{on}	-	35	-	ns	See specified test circuit.
Storage Time	t _{stg}	-	300	-	ns	See specified test circuit.
Fall Time	t _f	-	20	-	ns	See specified test circuit.

SwitchingTimeTest Circuit



Characteristics Curve

