

## TRIPLE DIFFUSED PLANER TYPE HIGH VOLTAGE,HIGH SPEED SWITCHING

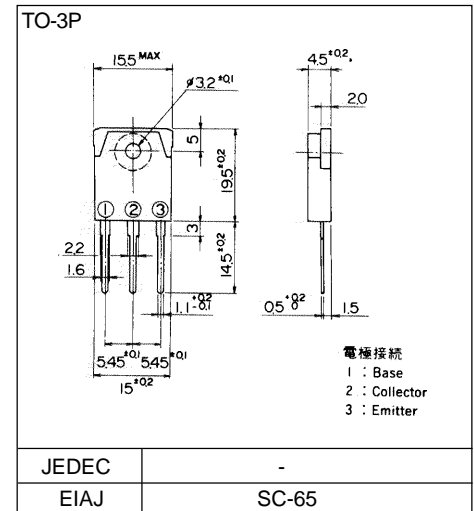
### Features

- High voltage,High speed switching
- High reliability

### Applications

- Switching regulators
- Ultrasonic generators
- High frequency inverters
- General purpose power amplifiers

### Outline Drawings



### Maximum ratings and characteristics

#### Absolute maximum ratings (Tc=25°C unless otherwise specified)

Item	Symbol	Ratings	Unit
Collector-Base voltage	VCBO	450	V
Collector-Emitter voltage	VCEO	400	V
Collector-Emitter voltage	VCEO(SUS)	400	V
Emitter-Base voltage	VEBO	7	V
Collector current	IC	10	A
Base current	IB	3	A
Collector power dissipation	PC	80	W
Operating junction temperature	Tj	+150	°C
Storage temperature	Tstg	-55 to +150	°C

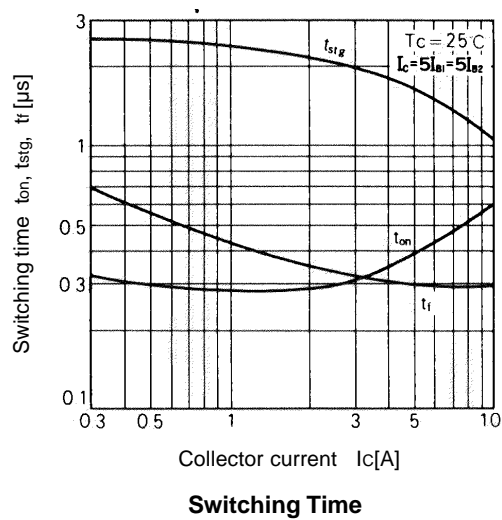
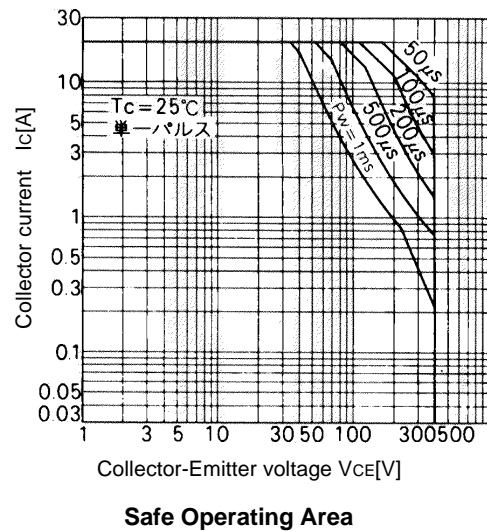
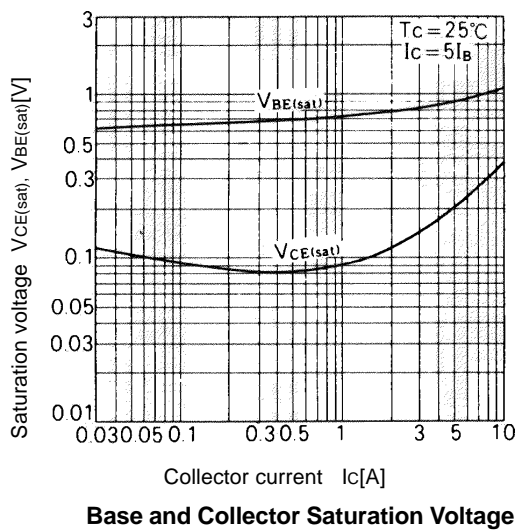
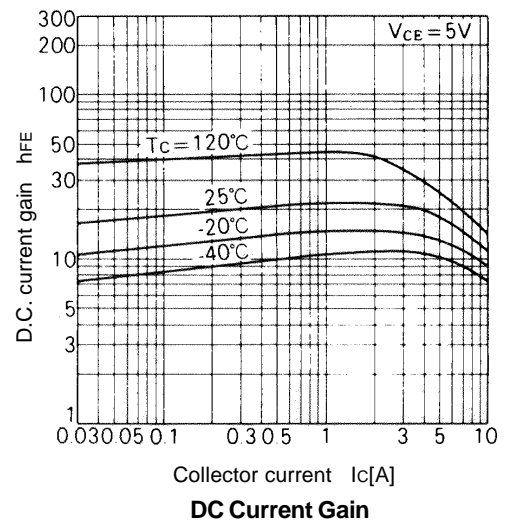
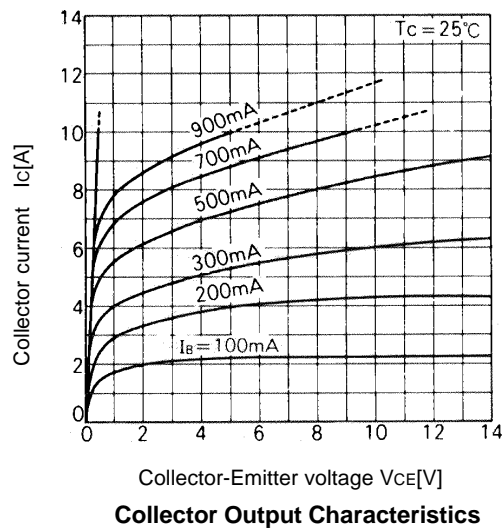
#### Electrical characteristics (Tc =25°C unless otherwise specified)

Item	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Collector-Base voltage	VCBO	ICBO = 1mA	450			V
Collector-Emitter voltage	VCEO	ICEO = 10mA	400			V
Collector-Emitter voltage	VCEO(SUS)	IC = 1A	400	-		V
Emitter-Base voltage	VEBO	IEBO = 0.1mA	7	-		V
Collector-Base leakage current	ICBO	VCBO = 450V		-	1.0	mA
Emitter-Base leakage current	IEBO	VEBO = 7V		-	0.1	mA
D.C. current gain	hFE	IC = 4A, VCE = 5V	10			
Collector-Emitter saturation voltage	VCE(Sat)	IC = 4A, IB = 0.8A			1.2	V
Base-Emitter saturation voltage	VBE(Sat)				1.5	V
*1	ton	IC = 7.5A, IB1 = -IB2 = 1.5A			1.0	μs
Switching time	tstg	RL = 20 ohm ,Pw = 20μs Duty=<2%			2.0	μs
	tf				1.0	μs

#### Thermal characteristics

Item	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Thermal resistance	Rth(j-c)	Junction to case			1.55	°C/W

■ Characteristics



\*1 Switching Time Test Circuit

