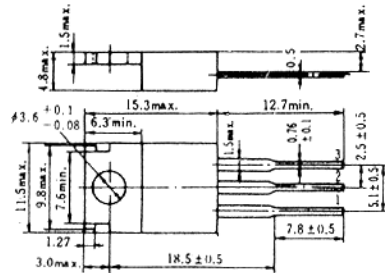


2SC2612

SILICON NPN TRIPLE DIFFUSED

HIGH VOLTAGE, HIGH SPEED AND HIGH POWER SWITCHING



1. Base
 2. Collector (Flange)
 3. Emitter
- (Dimensions in mm)

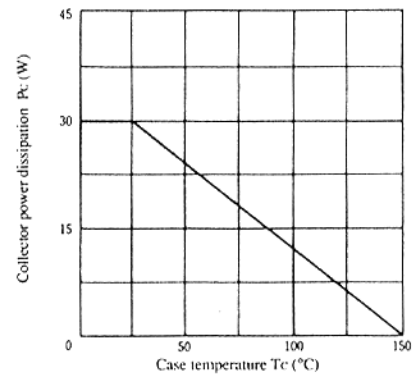
(JEDEC TO-220AB)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC2612	Unit
Collector to base voltage	VCBO	500	V
Collector to emitter voltage	VCEO	400	V
Emitter to base voltage	VEBO	7	V
Collector current	IC	3	A
Collector peak current	iC(peak)	6	A
Base current	IB	1.5	A
Collector power dissipation	PC*	30	W
Junction temperature	Tj	150	°C
Storage temperature	Tsig	-55 to +150	°C

* Value at Tc = 25°C

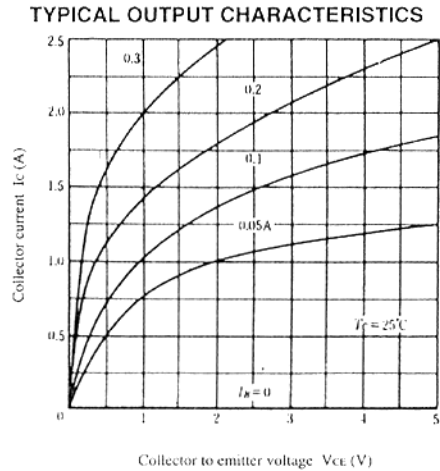
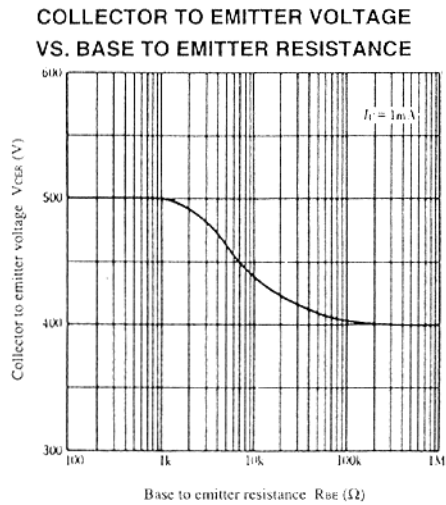
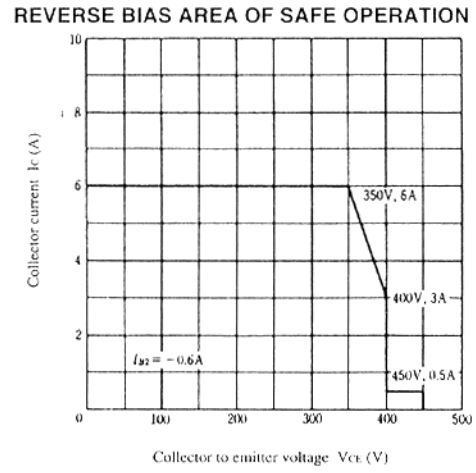
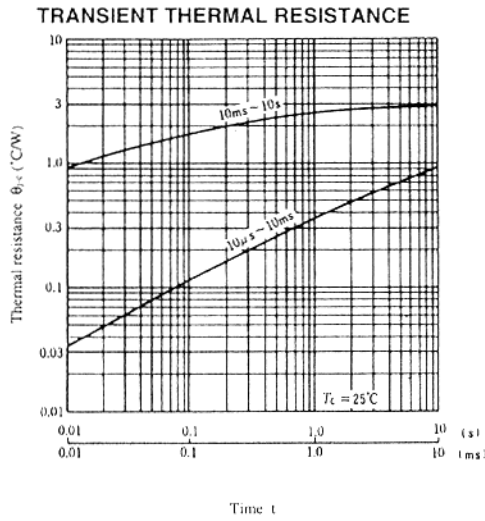
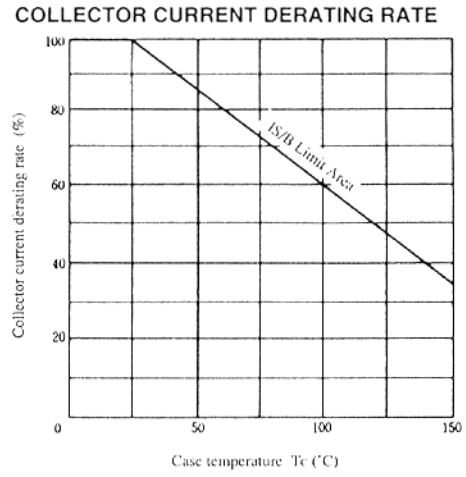
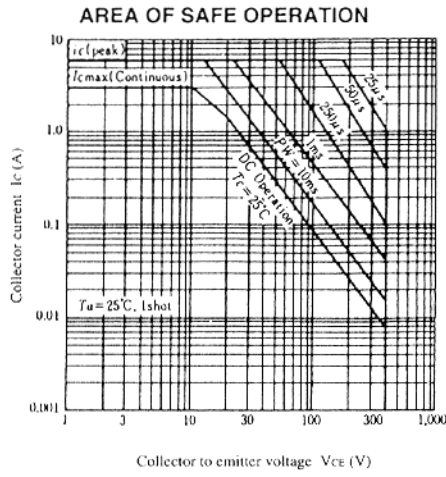
MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

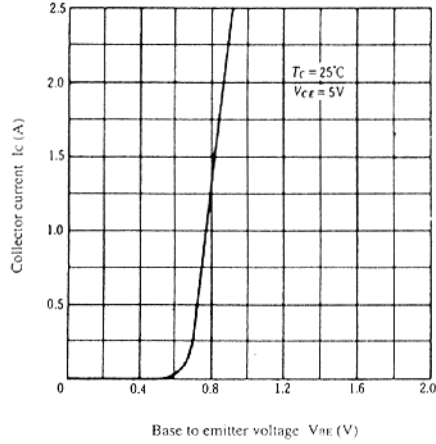
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to emitter sustain voltage	VCE0(sus)	IC = 0.2A, RBE = ∞, L = 100mH	400	—	—	V
	VCEX(sus)	IC = 3A, IB1 = -IB2 = 0.6A VBE = -5V, L = 180μH, Clamped	400	—	—	V
Emitter to base breakdown voltage	V(BR)EBO	IE = 10mA, IC = 0	7	—	—	V
Collector cutoff current	ICBO	VCB = 400V, IE = 0	—	—	100	μA
	ICEO	VCE = 350V, RBE = ∞	—	—	100	μA
DC current transfer ratio	hFE1	VCE = 5V, IC = 1.5A*	15	—	—	
	hFE2	VCE = 5V, IC = 3.0A*	7	—	—	
Collector to emitter saturation voltage	VCE(sat)	IC = 1.5A, IB = 0.3A*	—	—	1.0	V
Base to emitter saturation voltage	VBE(sat)	IC = 1.5A, IB = 0.3A*	—	—	1.5	V
Turn on time	ton	IC = 3A, IB1 = -IB2 = 0.6A, VCC ≈ 150V	—	—	1.0	μs
Storage time	tstg		—	1.2	2.5	μs
Fall time	tf		—	—	1.0	μs

* Pulse Test

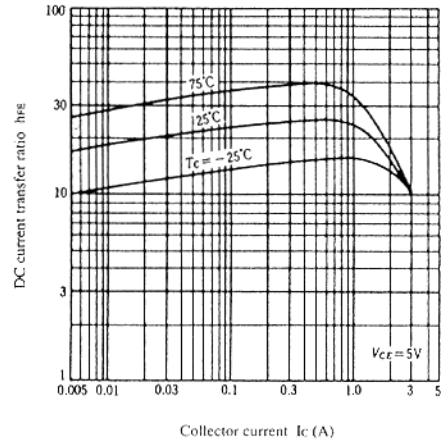


2SC2612

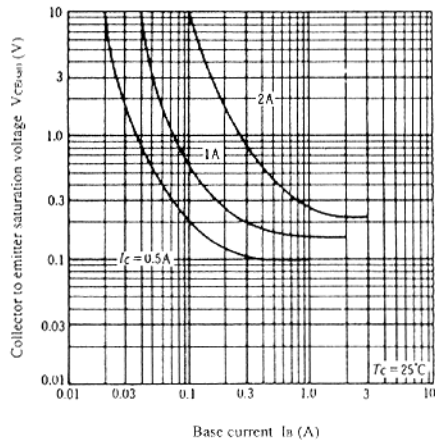
TYPICAL TRANSFER CHARACTERISTICS



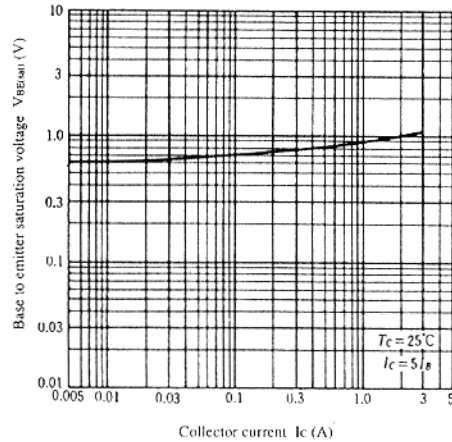
DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



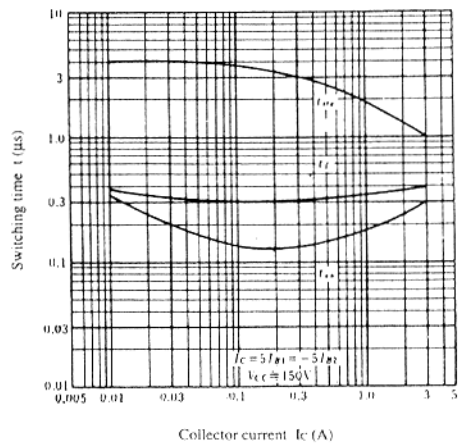
COLLECTOR TO EMITTER SATURATION VOLTAGE VS. BASE CURRENT



BASE TO EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT



SWITCHING TIME VS. COLLECTOR CURRENT



SWITCHING TIME VS. CASE TEMPERATURE

