

BC635/637/639

NPN EPITAXIAL SILICON TRANSISTOR

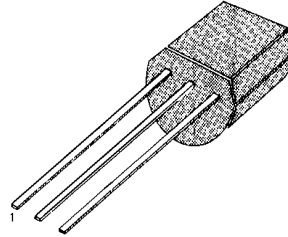
SWITCHING AND AMPLIFIER APPLICATIONS

- Complement to BC635/638/640

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector Emitter Voltage at R _{BE} =1Kohm	: BC635 : BC637 : BC639	V _{CER} 45 60 100	V V V
Collector Emitter Voltage	: BC635 : BC637 : BC639	V _{CES} 45 60 100	V V V
Collector Emitter Voltage	: BC635 : BC637 : BC639	V _{CEO} 45 60 80	V V V
Emitter Base Voltage	V _{EBO}	5	V
Collector Current	I _C	1	A
Peak Collector Current	I _{CP}	1.5	A
Base Current	I _B	100	mA
Collector Dissipation	P _C	1	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-65 ~ 150	°C

TO-92

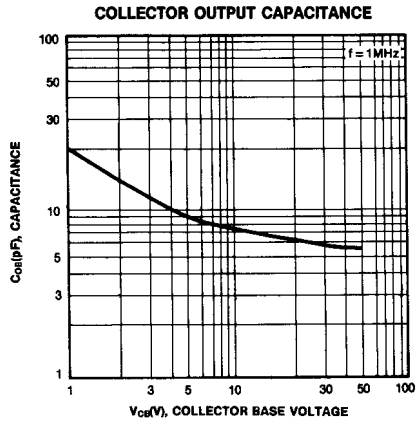
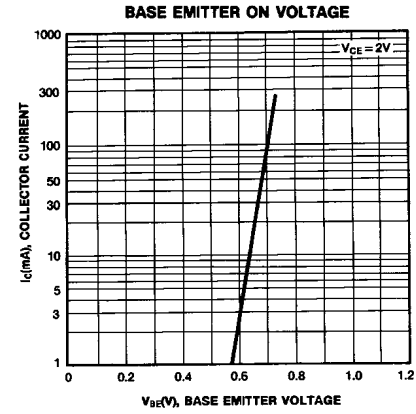
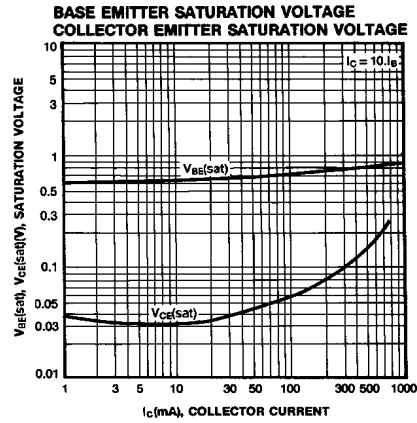
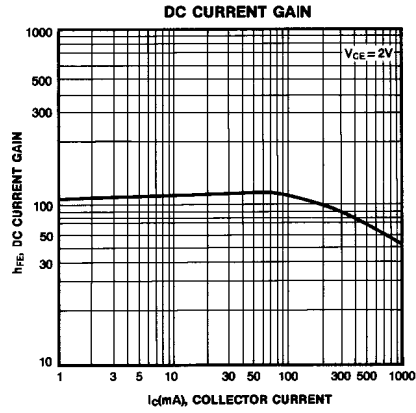
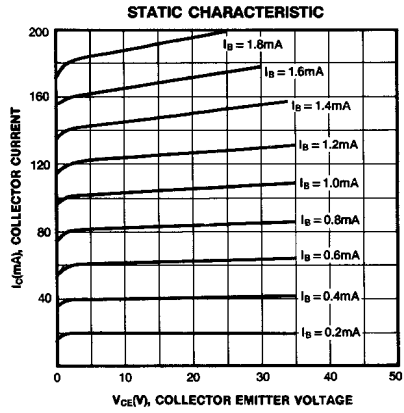


1. Emitter 2. Collector 3. Base

- PW=5ms, Duty Cycle=10%

ELECTRICAL CHARACTERISTICS (T_A=25°C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =10mA, I _B =0	45			V
: BC635			60			V
: BC736			80			V
: BC639						V
Collector Cut-off Current	I _{CBO}	V _{CB} =30V, I _E =0			0.1	μA
Emitter Cut-off Current	I _{EBO}	V _{EB} =5V, I _C =0			0.1	μA
DC Current Gain	h _{FE}	V _{CE} =2V, I _C =5mA	25			
: BC635		V _{CE} =2V, I _C =150mA	40		250	
: BC637/BC639			40		160	
Collector Emitter Saturation Voltage	V _{CE(sat)}	V _{CE} =2V, I _C =500mA	25			V
Base Emitter On Voltage	V _{BE(on)}	I _C =500mA, I _B =50mA			0.5	V
Current Gain Bandwidth Product	f _T	V _{CE} =2V, I _C =500mA		100	1	MHz
		V _{CE} =5V, I _C =10mA, f=50MHz				MHz



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