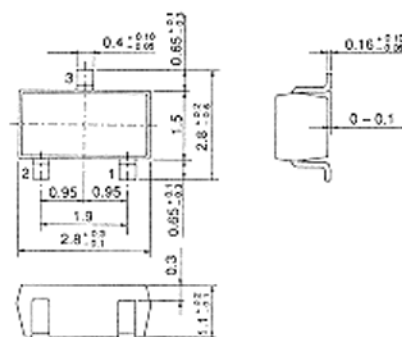


2SC3521

SILICON NPN EPITAXIAL PLANAR

HIGH FREQUENCY AMPLIFIER
SWITCH



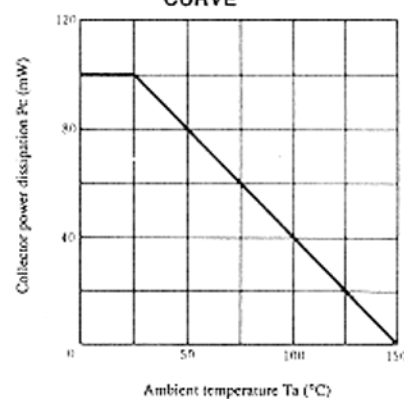
(MPAK)

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

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC3521	Unit
Collector to base voltage	V _{CB0}	40	V
Collector to emitter voltage	V _{CE0}	15	V
Emitter to base voltage	V _{EB0}	5	V
Collector current	I _C	100	mA
Collector power dissipation	P _C	100	mW
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

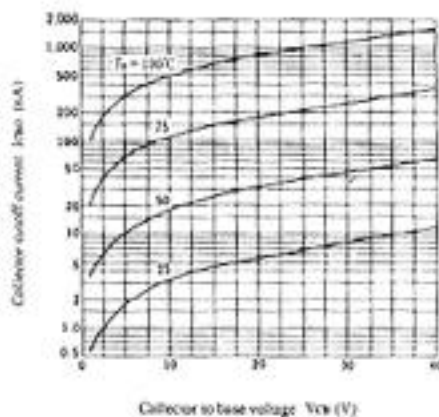
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	V _{(BR)CBO}	I _C = 10μA, I _E = 0	40	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _C = 10mA, R _{BE} = ∞	15	—	—	V
Emitter to base breakdown voltage	V _{(BR)EBO}	I _E = 10μA, I _C = 0	5	—	—	V
Collector cutoff current	I _{CBO}	V _{CB} = 20V, I _E = 0	—	—	0.25	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 4V, I _C = 0	—	—	1.0	μA
DC current transfer ratio	h _{FE} *	V _{CE} = 0.5V, I _C = 1mA	45	—	160	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 10mA, I _B = 1mA	—	—	0.3	V
Base to emitter saturation voltage	V _{BE(sat)}	I _C = 10mA, I _B = 1mA	—	—	0.8	V

* The 2SC3521 is grouped by h_{FE} as follows.

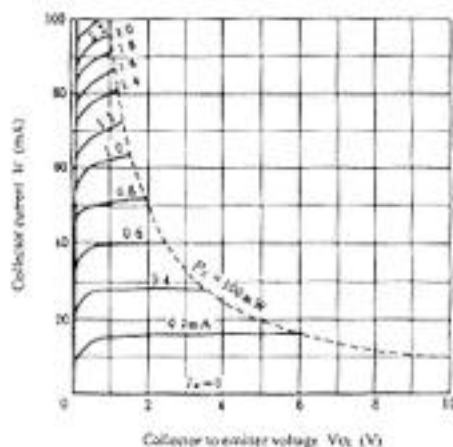
Grade	B	C
Mark	IKB	IKC
h _{FE}	45 to 90	80 to 160

2SC3521

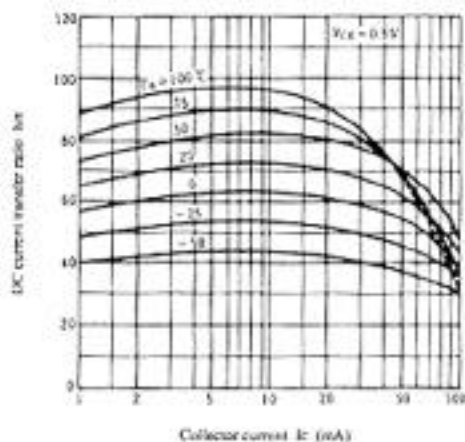
COLLECTOR CUTOFF CURRENT VS.
COLLECTOR TO BASE VOLTAGE



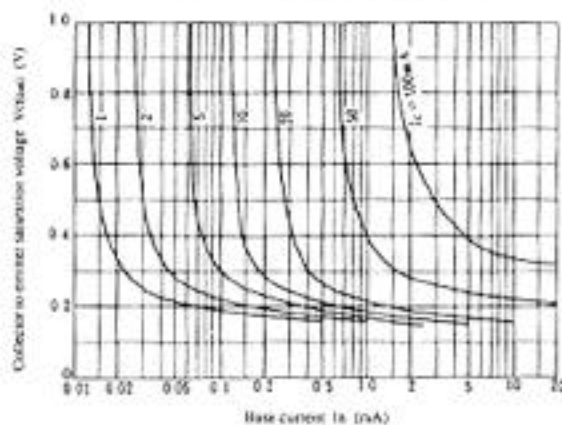
TYPICAL OUTPUT CHARACTERISTICS



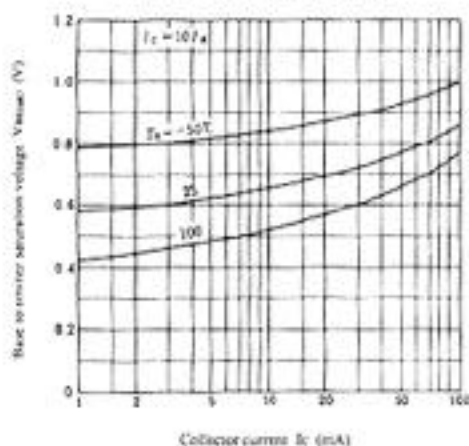
DC CURRENT TRANSFER RATIO VS.
COLLECTOR CURRENT



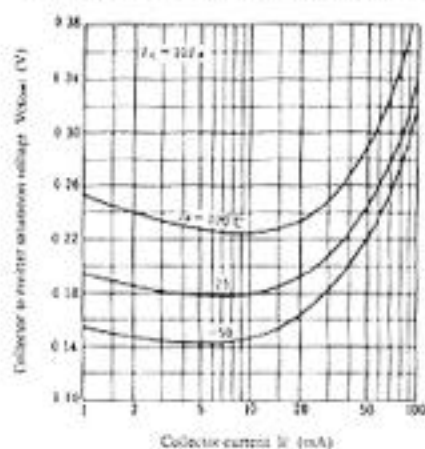
COLLECTOR TO EMITTER SATURATION
VOLTAGE VS. BASE CURRENT

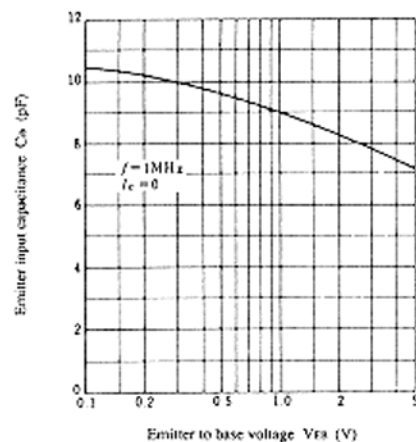


BASE TO EMITTER SATURATION VOLTAGE VS.
COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION
VOLTAGE VS. COLLECTOR CURRENT



EMITTER INPUT CAPACITANCE VS.
EMITTER TO BASE VOLTAGECOLLECTOR OUTPUT CAPACITANCE VS.
COLLECTOR TO BASE VOLTAGE