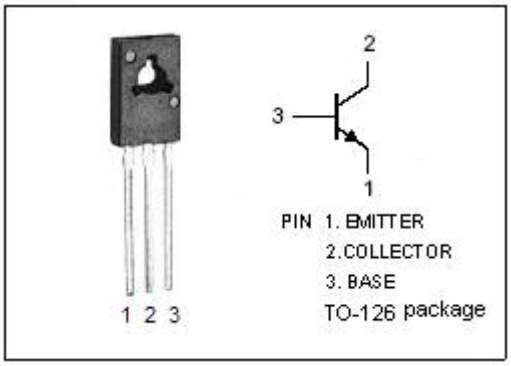
isc Silicon NPN Power Transistor 2SC3416

DESCRIPTION

- High Collector-Emitter Breakdown Voltage- $V_{(BR)CEO}$= 200V (Min)
- Complement to Type 2SA1352
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

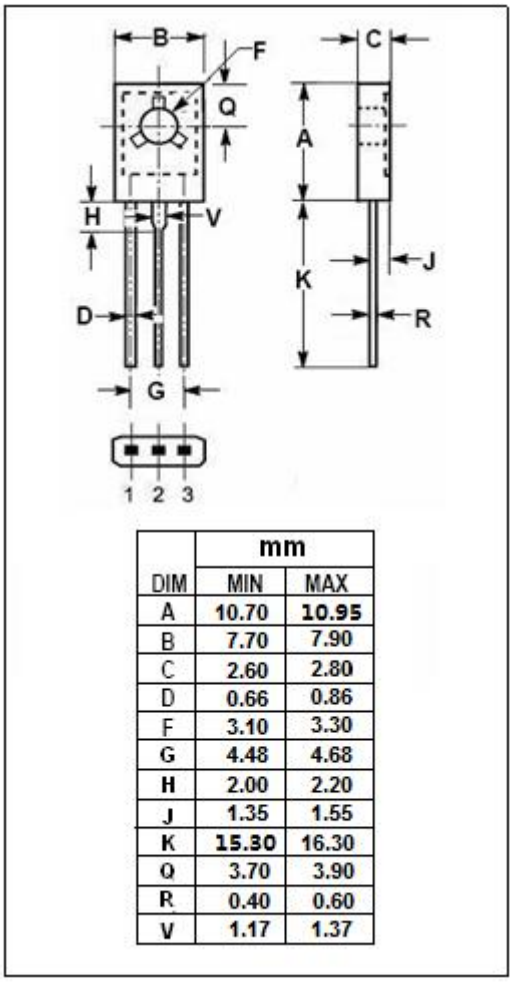


APPLICATIONS

- Designed for color TV chroma output, high-voltage driver applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current-Continuous	0.1	A
I_{CM}	Collector Current-Peak	0.2	A
P_C	Collector Power Dissipation @ T_a=25℃	1.2	W
	Total Power Dissipation @ T_C=25℃	5	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	10.70	10.95
B	7.70	7.90
C	2.60	2.80
D	0.66	0.86
F	3.10	3.30
G	4.48	4.68
H	2.00	2.20
J	1.35	1.55
K	15.30	16.30
Q	3.70	3.90
R	0.40	0.60
V	1.17	1.37

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 10 μA; I_E= 0	200			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 1mA; R_{BE}= ∞	200			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 10 μA; I_C= 0	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 20mA; I_B= 2mA			0.6	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 20mA; I_B= 2mA			1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 150V; I_E= 0			0.1	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C= 0			0.1	μA
h_{FE}	DC Current Gain	I_C= 10mA ; V_{CE}= 40V	40		320	
f_T	Current-Gain—Bandwidth Product	I_C= 10mA ; V_{CE}= 30V		70		MHz
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 30V; f= 1.0MHz		1.7		pF

◆ **h_{FE} Classifications**

C	D	E	F
40-80	60-120	100-200	160-320