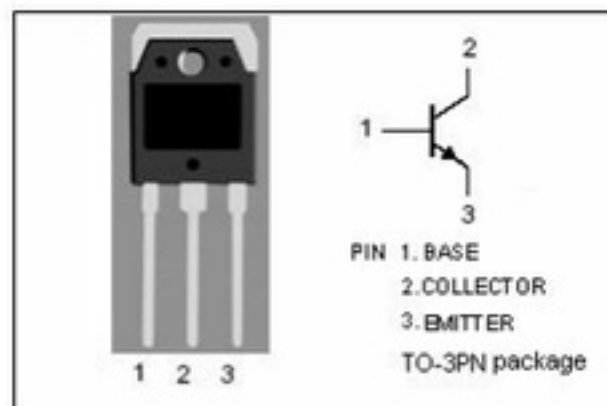


DESCRIPTION

- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = 160V(\text{Min})$ -2SC3519
 $= 180V(\text{Min})$ -2SC3519A
- Good Linearity of h_{FE}
- Complement to Type 2SA1386/A

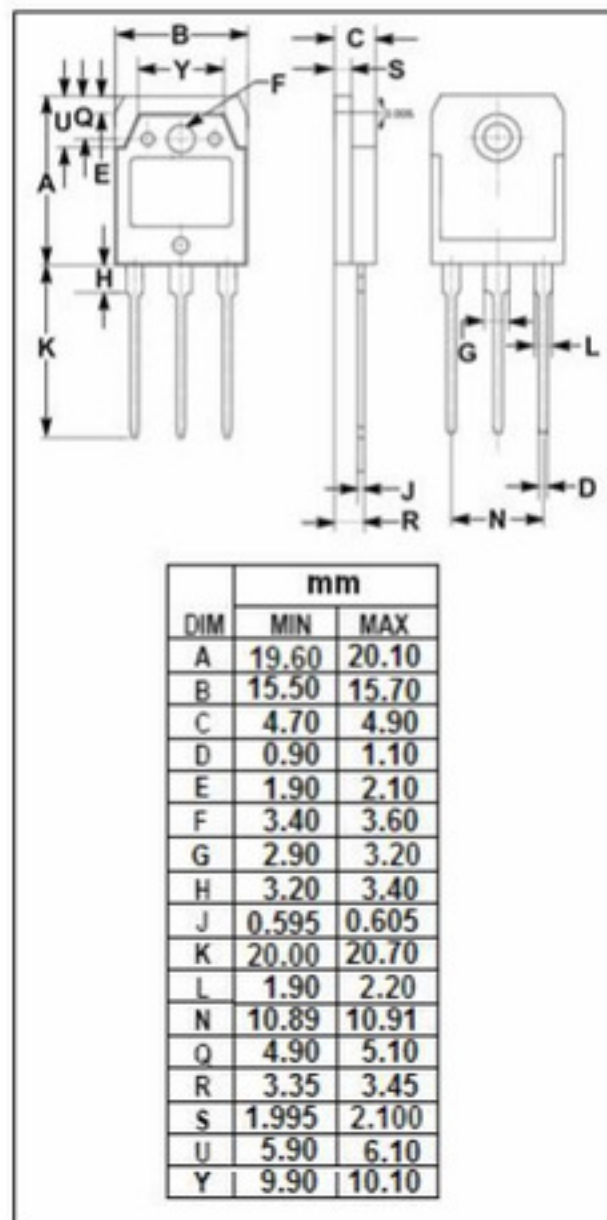
APPLICATIONS

- Designed for audio and general purpose applications



ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT	
V_{CBO}	Collector-Base Voltage	2SC3519	160	V
		2SC3519A	180	
V_{CEO}	Collector-Emitter Voltage	2SC3519	160	V
		2SC3519A	180	
V_{EBO}	Emitter-Base Voltage	5	V	
I_C	Collector Current-Continuous	15	A	
I_B	Base Current-Continuous	4	A	
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	130	W	
T_J	Junction Temperature	150	$^\circ\text{C}$	
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$	



ELECTRICAL CHARACTERISTICS

$T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	2SC3519	160			V
		2SC3519A				
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 5.0A; I_B = 0.5A$			2.0	V
I_{CBO}	Collector Cutoff Current	2SC3519			100	μA
		2SC3519A			100	
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 5V; I_C = 0$			100	μA
h_{FE}	DC Current Gain	$I_C = 5A; V_{CE} = 4V$	50		180	
C_{ob}	Output Capacitance	$I_E = 0; V_{CB} = 10V; f_{test} = 1.0\text{MHz}$		250		pF
f_T	Current-Gain—Bandwidth Product	$I_E = -2A; V_{CE} = 12V$		50		MHz

Switching Times

Symbol	Parameter	Conditions	MIN	TYP.	MAX	UNIT
t_{on}	Turn-on Time	$I_C = 10A, R_L = 4\Omega, I_{B1} = -I_{B2} = 1A, V_{CC} = 40V$		0.2		μs
t_{stg}	Storage Time			1.3		μs
t_f	Fall Time			0.45		μs

◆ h_{FE} Classifications

O	P	Y
50-100	70-140	90-180