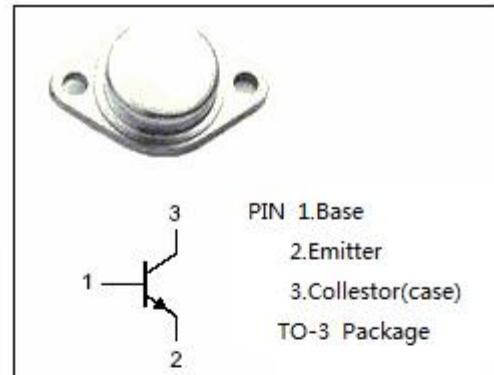




INCHANGE Semiconductor

isc Silicon NPN Power Transistor**2SD556****DESCRIPTION**

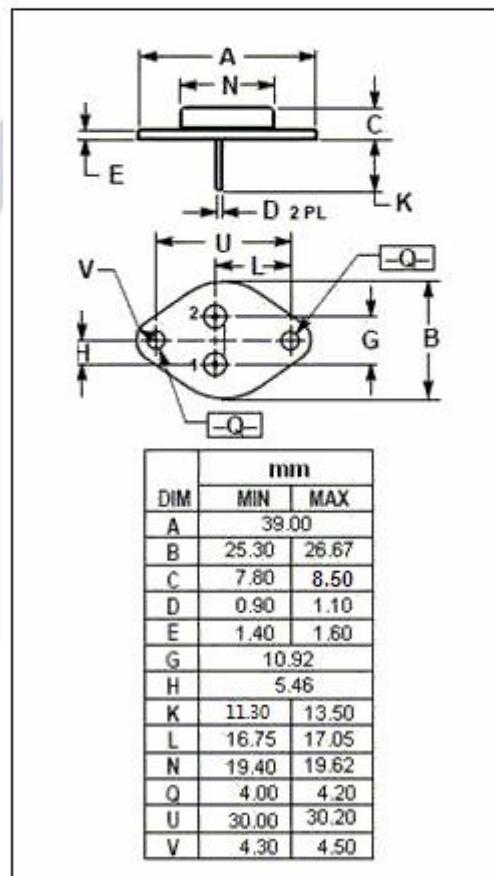
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 110V$ (Min)
- Wide Area of Safe Operation
- High Power
- High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for high power AF amplifier applications.

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

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	110	V
V_{CEO}	Collector-Emitter Voltage	110	V
V_{EBO}	Emitter-Base Voltage	6	V
I_c	Collector Current-Continuous	15	A
I_B	Base Current-Continuous	20	A
P_c	Collector Power Dissipation $@T_c=25^\circ C$	120	W
T_j	Junction Temperature	175	°C
T_{stg}	Storage Temperature Range	-65~175	°C



INCHANGE Semiconductor

isc Silicon NPN Power Transistor**2SD556****ELECTRICAL CHARACTERISTICS** $T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(\text{BR})\text{CEO}}$	Collector-Emitter Breakdown Voltage	$I_C = 10\text{mA} ; I_B = 0$	110			V
$V_{(\text{BR})\text{EBO}}$	Emitter-Base Breakdown Voltage	$I_E = 1\text{mA} ; I_C = 0$	6			V
$V_{\text{CE}(\text{sat})}$	Collector-Emitter Saturation Voltage	$I_C = 5\text{A} ; I_B = 0.5\text{A}$			1.0	V
$V_{\text{BE}(\text{on})}$	Base-Emitter On Voltage	$I_C = 5\text{A} ; V_{\text{CE}} = 4\text{V}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{\text{CB}} = 110\text{V} ; I_E = 0$			0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{\text{EB}} = 6\text{V} ; I_C = 0$			0.1	mA
$h_{\text{FE}-1}$	DC Current Gain	$I_C = 1\text{A} ; V_{\text{CE}} = 4\text{V}$	60		200	
$h_{\text{FE}-2}$	DC Current Gain	$I_C = 5\text{A} ; V_{\text{CE}} = 4\text{V}$	30		120	
f_T	Current-Gain—Bandwidth Product	$I_C = 0.5\text{A} ; V_{\text{CE}} = 10\text{V}$		8		MHz