

# isc Silicon PNP Power Transistors

## 2SB555

### DESCRIPTION

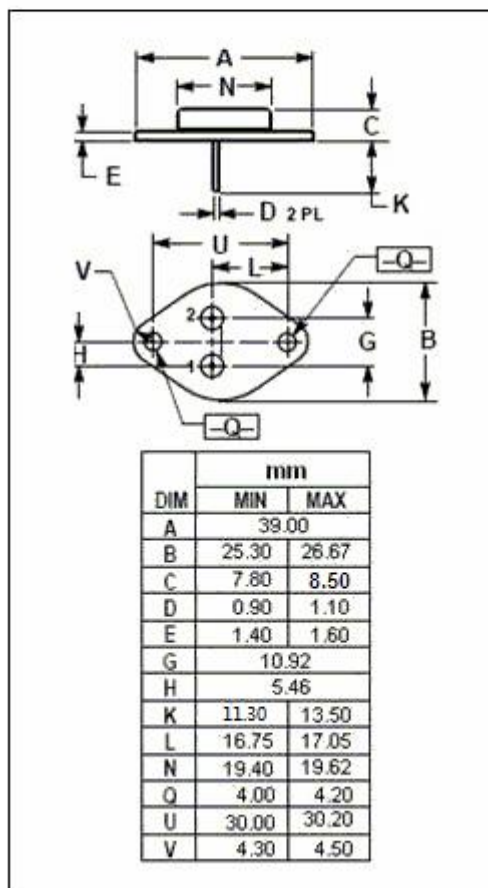
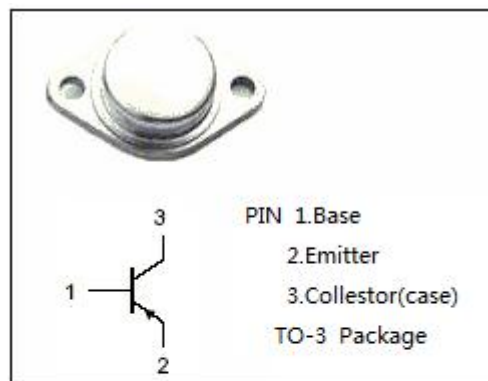
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -140V(\text{Min})$
- High Power Dissipation-  
:  $P_C = 80W(\text{Max})@T_C=25^\circ\text{C}$
- Complement to Type 2SD425
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

- Designed for power amplifier applications.
- Recommended for 80W high-fidelity audio frequency amplifier output stage.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-140	V
$V_{CEO}$	Collector-Emitter Voltage	-140	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-12	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	80	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-65~150	$^\circ\text{C}$



**isc Silicon PNP Power Transistors****2SB555****ELECTRICAL CHARACTERISTICS**

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -30\text{mA}$ ; $I_B = 0$	-140			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -10\text{mA}$ ; $I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -7\text{A}$ ; $I_B = -0.7\text{A}$			-3.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -7\text{A}$ ; $V_{CE} = -5\text{V}$			-2.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -60\text{V}$ ; $I_E = 0$			-0.1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}$ ; $I_C = 0$			-0.1	mA
$h_{FE}$	DC Current Gain	$I_C = -2\text{A}$ ; $V_{CE} = -5\text{V}$	40		140	
$C_{OB}$	Output Capacitance	$I_E = 0$ ; $V_{CB} = -10\text{V}$ ; $f = 1\text{MHz}$		330		pF
$f_T$	Current-Gain—Bandwidth Product	$I_C = -2\text{A}$ ; $V_{CE} = -5\text{V}$		6		MHz

**◆  $h_{FE}$  Classifications**

R	O
40-80	70-140

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