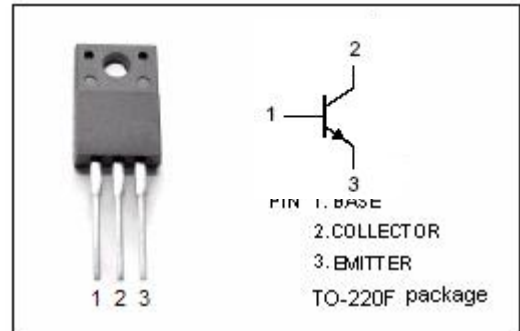


**isc Silicon NPN Power Transistor****2SD2374A****DESCRIPTION**

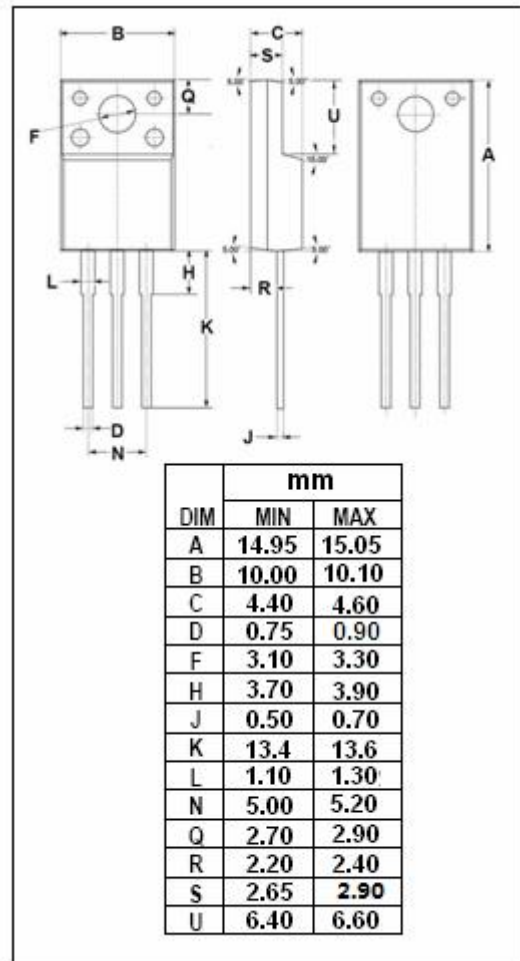
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 80V(\text{Min})$
- Collector Power Dissipation-  
:  $P_C = 25 W @ T_C = 25^\circ C$
- Low Collector Saturation Voltage-  
:  $V_{CE(sat)} = 1.2V(\text{Max}) @ (I_C = 3A, I_B = 0.375A)$
- Complement to Type 2SB1548A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for power amplifications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	80	V
$V_{CEO}$	Collector-Emitter Voltage	80	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current-Continuous	3	A
$I_{CM}$	Collector Current-Peak	5	A
$P_C$	Collector Power Dissipation @ $T_a = 25^\circ C$	2	W
	Collector Power Dissipation @ $T_C = 25^\circ C$	25	
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature	-55~150	$^\circ C$



## isc Silicon NPN Power Transistor

## 2SD2374A

## ELECTRICAL CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = 30mA; I_B = 0$	80			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 3A; I_B = 0.375A$			1.2	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = 3A; V_{CE} = 4V$			1.8	V
$I_{CES}$	Collector Cutoff Current	$V_{CE} = 80V; V_{BE} = 0$			200	$\mu A$
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = 60V; I_B = 0$			300	$\mu A$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = 6V; I_C = 0$			1	mA
$h_{FE-1}$	DC Current Gain	$I_C = 1A; V_{CE} = 4V$	70		250	
$h_{FE-2}$	DC Current Gain	$I_C = 3A; V_{CE} = 4V$	10			
$f_T$	Current-Gain—Bandwidth Product	$I_C = 0.5A; V_{CE} = 10V; f_{test} = 10MHz$		30		MHz

◆  $h_{FE-1}$  Classifications

Q	P
70-150	120-250

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