

isc Silicon NPN Power Transistor

2SD1488

DESCRIPTION

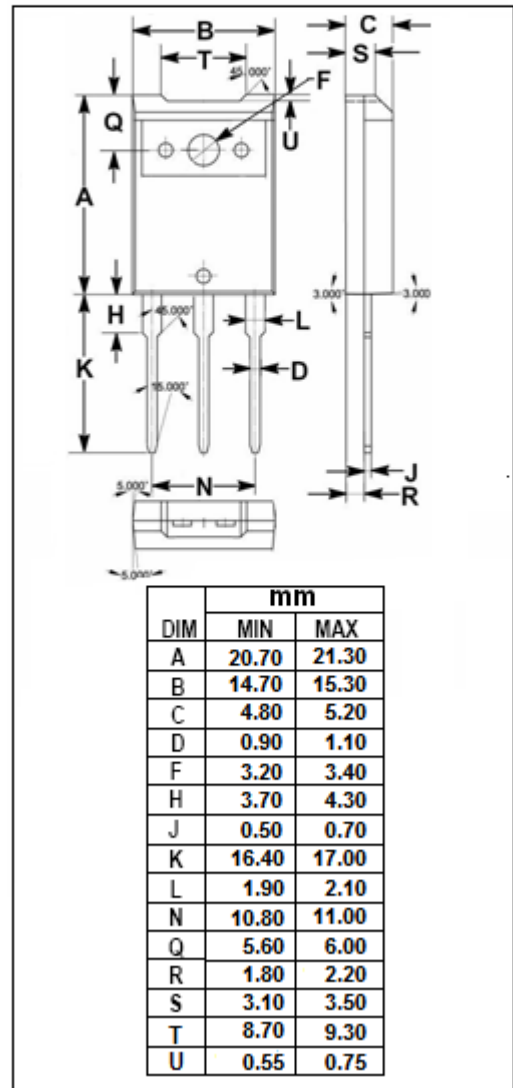
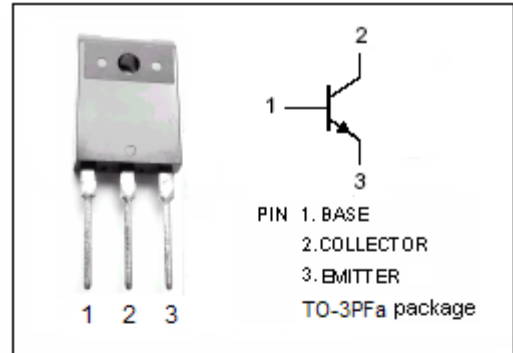
- Low Collector Saturation Voltage-  
:  $V_{CE(sat)} = 2.0V(Max) @ I_C = 7A$
- Wide Area of Safe Operation
- Complement to Type 2SB1057

APPLICATIONS

- Designed for high power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	150	V
$V_{CEO}$	Collector-Emitter Voltage	150	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	9	A
$I_{CM}$	Collector Current-Peak	15	A
$P_C$	Collector Power Dissipation @ $T_a=25^{\circ}C$	3	W
	Collector Power Dissipation @ $T_C=25^{\circ}C$	100	
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}C$



**isc Silicon NPN Power Transistor****2SD1488****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=7\text{A}; I_B=0.7\text{A}$			2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=7\text{A}; V_{CE}=5\text{V}$			1.8	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=150\text{V}; I_E=0$			50	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=3\text{V}; I_C=0$			50	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C=20\text{mA}; V_{CE}=5\text{V}$	20			
$h_{FE-2}$	DC Current Gain	$I_C=1\text{A}; V_{CE}=5\text{V}$	40		200	
$h_{FE-3}$	DC Current Gain	$I_C=7\text{A}; V_{CE}=5\text{V}$	20			
$C_{OB}$	Output Capacitance	$I_E=0; V_{CB}=10\text{V}; f=1.0\text{MHz}$		450		pF
$f_T$	Current-Gain—Bandwidth Product	$I_C=0.5\text{A}; V_{CE}=10\text{V}$		20		MHz

◆  **$h_{FE-2}$  Classifications**

R	Q	P
40-80	60-120	100-200