

ISC Silicon NPN Power Transistor

2SD1487

DESCRIPTION

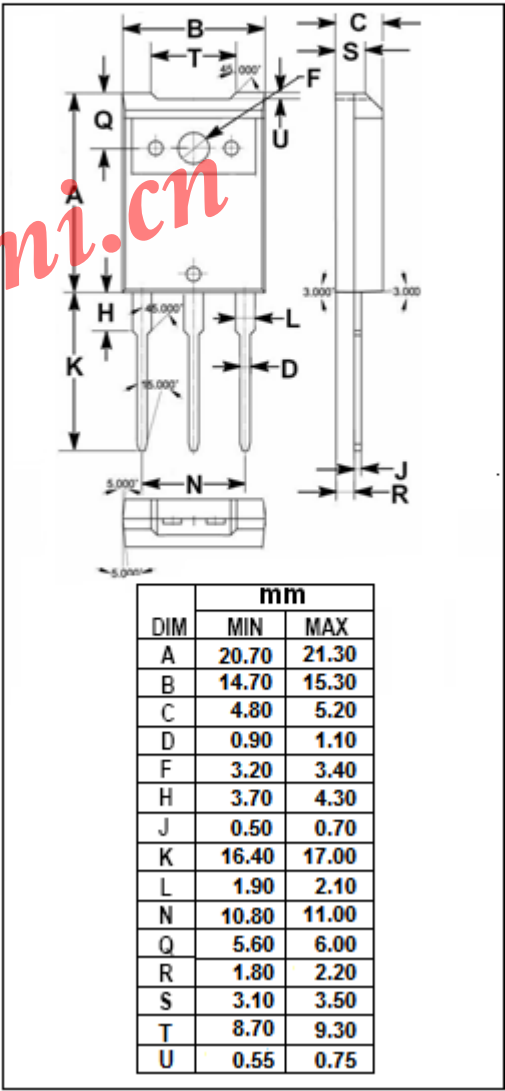
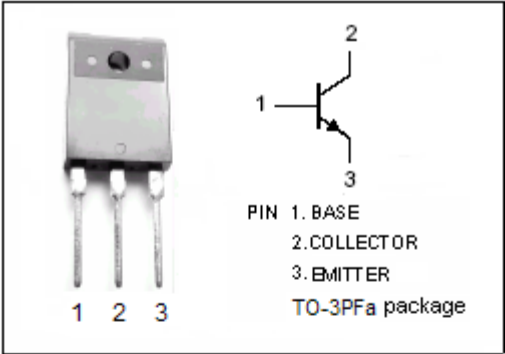
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = 2.0V(Max) @ I_C = 5A$
- Wide Area of Safe Operation
- Complement to Type 2SB1056

APPLICATIONS

- Designed for high power amplifier applications.

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

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	7	A
I_{CM}	Collector Current-Peak	12	A
P_C	Collector Power Dissipation @ $T_a=25^{\circ}C$	3	W
	Collector Power Dissipation @ $T_c=25^{\circ}C$	80	
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



ISC Silicon NPN Power Transistor**2SD1487****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	$I_C=5\text{A}; I_B=0.5\text{A}$			2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=5\text{A}; V_{CE}=5\text{V}$			1.8	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=140\text{V}; I_E=0$			50	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=3\text{V}; I_C=0$			50	μA
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	$I_C=5\text{A}; V_{CE}=5\text{V}$	20			
C_{OB}	Output Capacitance	$I_E=0; V_{CB}=10\text{V}; f=1.0\text{MHz}$		330		pF
f_T	Current-Gain—Bandwidth Product	$I_C=0.5\text{A}; V_{CE}=5\text{V}$		20		MHz

◆ **h_{FE-2} Classifications**

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