

INCHANGE Semiconductor

isc Product Specification

isc Silicon NPN Power Transistor

2SC2489

DESCRIPTION

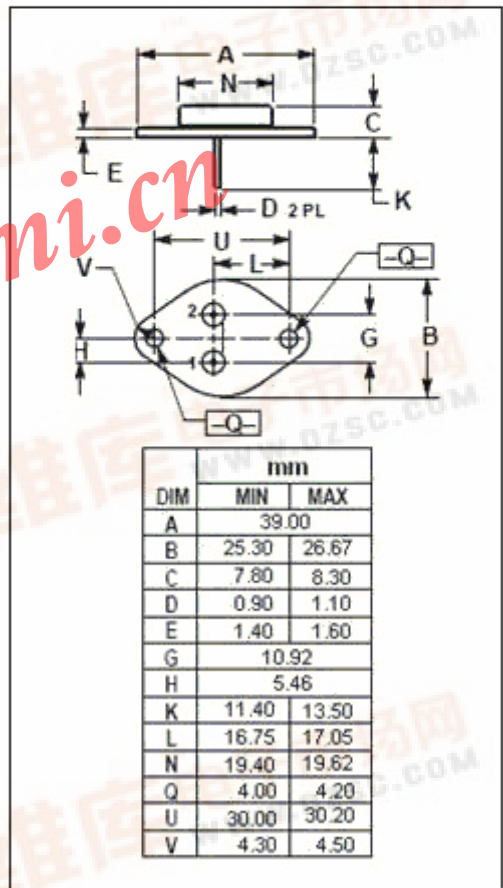
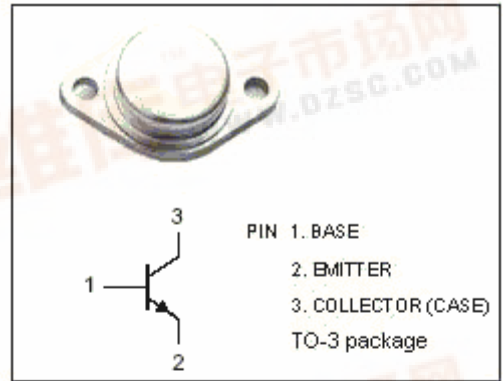
- Good Linearity of h_{FE}
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 150V$ (Min)
- Wide Area of Safe Operation
- Complement to Type 2SA1065

APPLICATIONS

- Designed for AF amplifier, high power amplifier applications.

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

SYMBOL	PARAMETER	MAX	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	10	A
I_{CM}	Collector Current-Peak	15	A
P_C	Collector Power Dissipation @ $T_C=25^\circ C$	120	W
T_j	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-65~150	$^\circ C$



isc Silicon NPN Power Transistor

2SC2489

ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=0.1\text{A}; I_E=0$	150			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=8\text{A}; I_B=0.8\text{A}$			2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=10\text{A}; V_{CE}=5\text{V}$			2.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=70\text{V}; I_E=0$			1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			2	mA
h_{FE-1}	DC Current Gain	$I_C=2\text{A}; V_{CE}=5\text{V}$		40	280	
h_{FE-2}	DC Current Gain	$I_C=10\text{A}; V_{CE}=5\text{V}$		30		
f_T	Current-Gain—Bandwidth Product	$I_C=0.5\text{A}; V_{CE}=10\text{V}$		50		MHz

◆ h_{FE-1} Classifications

R	Q	P	O
40-80	60-120	90-180	140-280