

isc Silicon PNP Power Transistor

2SB775

DESCRIPTION

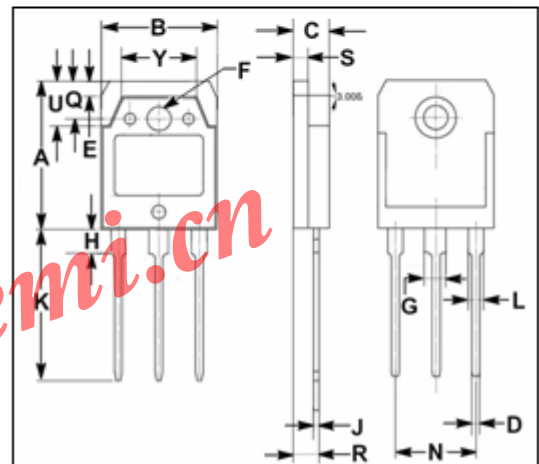
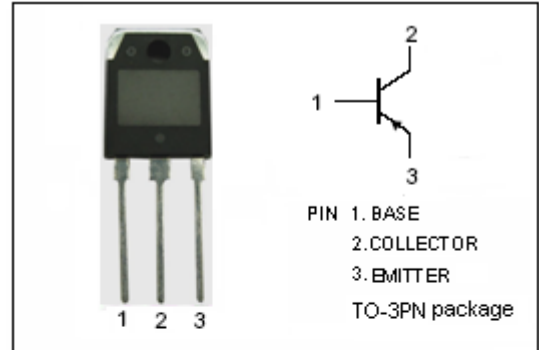
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -85V(\text{Min})$
- Good Linearity of h_{FE}
- High Current Capability
- Wide Area of Safe Operation
- Complement to Type 2SD895

APPLICATIONS

- Designed for 35W audio frequency output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-85	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-6	A
I_{CP}	Collector Current-Pulse	-10	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	60	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-40~150	$^\circ\text{C}$



DIM	mm	
	MIN	MAX
A	19.90	20.10
B	15.38	15.42
C	4.75	4.85
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.98	3.02
H	3.20	3.40
J	0.595	0.605
K	19.95	20.25
L	1.98	2.02
N	10.89	10.91
Q	4.95	5.05
R	3.35	3.45
S	1.995	2.005
U	5.90	6.10
Y	9.90	10.10

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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -50\text{mA}$; $R_{BE} = \infty$	-85			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -5\text{mA}$; $I_E = 0$	-100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -5\text{mA}$; $I_C = 0$	-6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -4\text{A}$; $I_B = -0.4\text{A}$			-2.0	V
$V_{BE(on)}$	Base -Emitter On Voltage	$I_C = -1\text{A}$; $V_{CE} = -5\text{V}$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -40\text{V}$; $I_E = 0$			-100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -4\text{V}$; $I_C = 0$			-100	μA
h_{FE-1}	DC Current Gain	$I_C = -1\text{A}$; $V_{CE} = -5\text{V}$	60		200	
h_{FE-2}	DC Current Gain	$I_C = -3\text{A}$; $V_{CE} = -5\text{V}$	20			
C_{OB}	Output Capacitance	$V_{CB} = -10\text{V}$; $f_{test} = 1.0\text{MHz}$		160		pF
f_T	Current-Gain—Bandwidth Product	$I_C = -1\text{A}$; $V_{CE} = -5\text{V}$		18		MHz

Switching times

t_{on}	Turn-on Time	$I_C = -1\text{A}$, $R_L = 20\Omega$, $I_{B1} = -I_{B2} = -0.1\text{A}$, $V_{CC} = -20\text{V}$		0.12		μs
t_{stg}	Storage Time			1.29		μs
t_f	Fall Time			0.36		μs

◆ h_{FE-1} Classifications

D	E
60-120	100-200