isc Silicon NPN Power Transistors 2N6674/6675

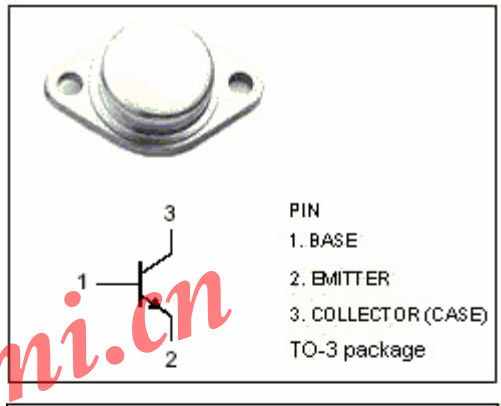
DESCRIPTION

- High Power Dissipation
- High Switching Speed
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 300V(Min)- 2N6674
  = 400V(Min)- 2N6675

APPLICATIONS

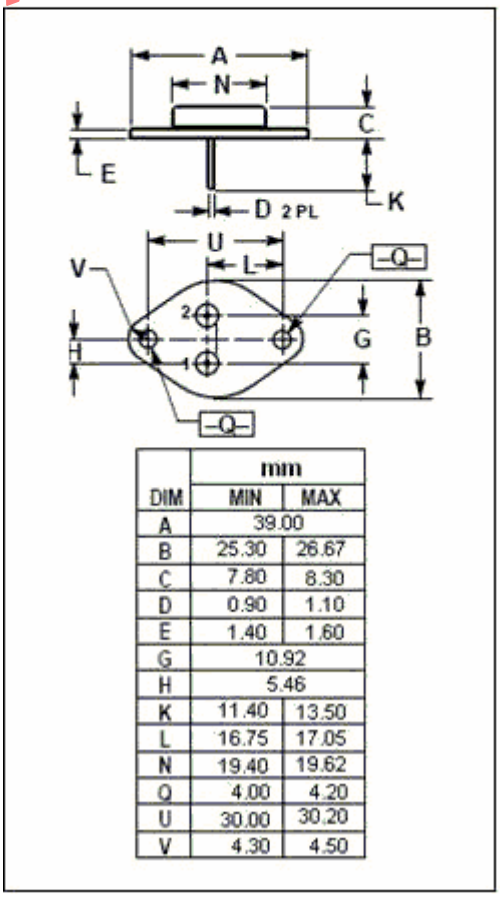
Designed for high voltage switching applications such as:

- Switching regulators
- Inverters
- Solenoid and relay drivers
- Deflection circuits



ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{CBO}	Collector-Base Voltage	2N6674	450	V
		2N6675	650	
V_{CEO}	Collector-Emitter Voltage	2N6674	300	
		2N6675	400	
V_{CEX}	Collector-Emitter Voltage	2N6674	450	V
		2N6675	650	
V_{EBO}	Emitter-Base Voltage		7	V
I_C	Collector Current-Continuous		15	A
I_B	Base Current-Continuous		5.0	A
P_C	Collector Power Dissipation@T_a=25℃		6	W
	Collector Power Dissipation@T_C=25℃		175	
T_J	Junction Temperature		200	℃
T_{stg}	Storage Temperature		-65~200	℃



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.30
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.40	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.0	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	2N6674	I_C= 200mA ; I_B= 0	300		V
		2N6675		400		
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage		I_C= 10A; I_B= 2A		1.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage		I_C= 15A; I_B= 5A		5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage		I_C= 10A; I_B= 2A		1.5	V
I_{CEX}	Collector Cutoff Current	2N6674	V_{CE}= 450V; V_{BE}= -1.5V		0.1	mA
		2N6675	V_{CE}= 650V; V_{BE}= -1.5V		0.1	
I_{CBO}	Collector Cutoff Current	2N6674	V_{CB}= 450V; I_E= 0		1.0	mA
		2N6675	V_{CB}= 650V; I_E= 0		1.0	
I_{EBO}	Emitter Cutoff Current		V_{EB}= 7V; I_C= 0		2.0	mA
h_{FE-1}	DC Current Gain		I_C= 1A ; V_{CE}= 3V	15	40	
h_{FE-2}	DC Current Gain		I_C= 10A ; V_{CE}= 2V	8	20	
C_{OB}	Output Capacitance		I_E= 0; V_{CB}= 10V; f_{test}= 1MHz		500	pF