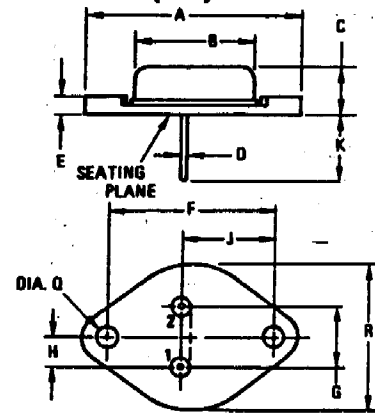


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2N5613

7.5 AMPERE
 POWER TRANSISTOR
 PNP SILICON



STYLE 1:
 PIN 1. BASE
 2. EMITTER
 CASE: COLLECTOR

NOTE:
 1. DIM "Q" IS DIA.

MAXIMUM RATING

Rating	Symbol		Unit
Collector-Emitter Voltage	V _{CEO}	80	V _{dc}
Collector-Base Voltage	V _{CB}	100	V _{dc}
Emitter-Base Voltage	V _{EB}	10	V _{dc}
Collector Current-Continuous	I _C	7.5	A _{dc}
Base Current - Continuous	I _B	4.0	A _{dc}

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	-	39.37	-	1.550
B	-	21.08	-	0.830
C	6.35	7.62	0.250	0.300
D	0.95	1.09	0.039	0.043
E	-	3.43	-	0.135
F	28.90	30.40	1.177	1.197
G	10.67	11.18	0.420	0.440
H	5.33	5.59	0.210	0.220
J	18.64	17.15	0.655	0.675
K	11.18	12.19	0.440	0.480
Q	3.84	4.09	0.151	0.161
R	-	28.67	-	1.090

Collector connected to case.

(TO-3)

ELECTRICAL CHARACTERISTICS (T_C = 25°C unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Emitter-Base Cutoff Current (V _{EB} = 10 V _{dc})	I _{EBO}	-	-	0.25	mA _{dc}
Collector-Emitter Cutoff Current (V _{CE} = 80 V _{dc} , V _{BE} = -1 V _{dc}) (V _{CE} = 80 V _{dc} , V _{BE} = -1 V _{dc} , T _C = 150°C)	I _{CEX}	-	-	0.1 1.0	mA _{dc}
Collector-Emitter Cutoff Current (V _{CE} = 60 V _{dc} , I _B = 0)	I _{CEO}	-	-	1.0	mA _{dc}
Collector-Base Breakdown Voltage (I _C = 1 mA _{dc} , I _E = 0)	BV _{CB0}	100	-	-	V _{dc}
Collector-Emitter Sustaining Voltage (I _C = 100 mA _{dc} , I _B = 0)	V _{CEO(sus)}	80	-	-	V _{dc}
DC Current Gain (I _C = 0.5 A _{dc} , V _{CE} = 5 V _{dc}) (I _C = 5 A _{dc} , V _{CE} = 5 V _{dc})	h _{FE}	20 40 40	45 85 75	-	-
Collector-Emitter Saturation Voltage (I _C = 5 A _{dc} , I _B = 0.5 A _{dc})	V _{CE(sat)}	-	0.8	1.5	V _{dc}
Base-Emitter Saturation Voltage (I _C = 5 A _{dc} , I _B = 0.5 A _{dc})	V _{BE(sat)}	-	1.0	1.5	V _{dc}
Base-Emitter Voltage (I _C = 5 A _{dc} , V _{CE} = 5 V _{dc})	V _{BE}	-	1.0	1.4	V _{dc}
Small Signal Current Gain (V _{CE} = 10 V _{dc} , I _C = 0.5 A _{dc} , f = 1 KHz) (V _{CE} = 10 V _{dc} , I _C = 0.5 A _{dc} , f = 10 MHz)	h _{fe}	40 1.0	- 1.6	200 -	-
Common Base Output Capacitance (V _{CB} = 10 V _{dc} , f = 0.1 MHz)	C _{ob}	-	260	400	pf
Switching Times (V _{CC} = 25 V _{dc} , R _L = 5 ohms, I _C = 5 A, I _{B1} = I _{B2} = 0.5 A)	t _d + t _r	-	0.15	0.35	μs
Delay Time plus Rise Time	t _s	-	0.9	2.0	μs
Storage Time	t _s	-	0.15	0.35	μs
Fall Time	t _f	-	-	-	μs