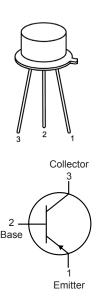
Silicon Transistor









Description:

A silicon PNP transistor in a TO-39 type case designed primarily for amplifier and switching applications. This device features high breakdown voltage, low leakage current, low capacity, and beta useful over an extremely wide current range.

Maximum Ratings:

Characteristic	Symbol	Rating	Unit		
Collector-Base Voltage	V _{CBO}	60	V		
Collector-Emitter Voltage	V _{CEO}	40			
Emitter Base Voltage	V _{EBO}	V _{EBO} 7			
Continuous Collector Current	I _C	1	А		
Total Device Dissipation -(T _A = +25°C), Derate Above 25°C	D	1 5.72	W		
Total Device Dissipation -(T _C = +25°C), Derate Above 25°C	P _D	5 28.6	mW/°C		
Operating Junction Temperature Range	T _J	-65 to +200	°C		
Storage Temperature Range	T _{stg}	-03 (0 +200			
Thermal Resistance, Junction-to-Case	R _{thJC}	35	°C/W		
Lead temperature (During Soldering, 1/16" from case, 60sec max)	T _L	300	°C		

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Silicon Transistor

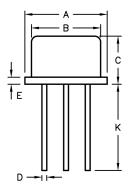


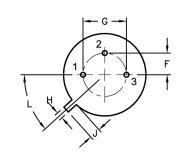
Electrical Characteristics: (T_A = +25°C Unless otherwise specified)

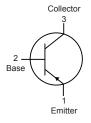
Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
OFF Characteristics						,
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C = 100mA, I _B = 0	40		-	V
Collector-Base Breakdown Voltage	V _{(BR)CBO}	$I_{\rm C} = 100 \mu \text{A}, I_{\rm E} = 0$	60			
Collector Cut-Off Current	I_{CBO} $V_{CB} = 60 \text{V}, I_{E} = 0$ -				250	nA
Emitter Cut-Off Voltage	I _{EBO}	$V_{BE} = 5V, I_{C} = 0$]	1	μΑ
ON Characteristics (Note 1)						
DC Current Gain	h	V _{CE} = 10V, I _C = 1mA	15		-	
DC Current Gain	h _{FE}	V _{CE} = 10V, I _C = 150mA	50		250	-
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C = 150mA, I _B = 15mA] -	1.4	V
Base-Emitter On Voltage	V _{BE(on)}	V _{CE} = 10V, I _C = 150mA] -		1.5	V
Small-Signal Characteristics						
Small-Signal Current Gain	h _{fe}	V _{CE} = 10V, I _C = 50mA, f = 20MHz	3	-	-	-

Note:

1. Pulse Test : Pulse Width ≤300µs, Duty Cycle ≤1%







Dim	Α	В	С	D	E	F	G	Н	J	K	L
Min.	8.5	7.74	6.09	0.4	-	2.41	4.82	0.71	0.73	12.7	42°
Max.	9.39	8.5	6.6	0.53	0.88	2.66	5.33	0.86	1.02	-	48°

Dimensions: Millimetres

Part Number Table

Description	Part Number			
Transistor, PNP ,1A, 40V, TO-39	2N4037			

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