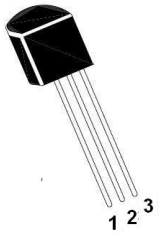
NPN SILICON PLANNAR
MEDIUM POWER TRANSISTOR



1. EMITTER
2. BASE
3. COLLECTOR

2N6731
TO-92
Plastic Package

MAXIMUM RATINGS (T_a=25°C, unless otherwise specified)

PARAMETERS	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5	V
Peak Pulse Current	I_{CM}	2	A
Continuous Collector Current	I_C	1	A
Power Dissipation at T_{amb}=25°C	P_{tot}	1	W
Operating and Storage Temperature Range	T_j;T_{stg}	-55 to 200	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	MAX.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=100μA, I_E=0	100	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0,*	80	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E= 1mA, I_C=0	5	-	V
Collector Cut-off Current	I_{CBO}	V_{CB}=80V, I_E=0	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	-	10	μA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_B=35mA, I_C=350mA *	-	0.35	V
Base-Emitter Turn-On Voltage	$V_{BE(on)}$	V_{CE}=2V, I_C=350mA *	-	1.0	V
Static Forward Current Transfer Ratio	h_{FE}	V_{CE}=2V, I_C=10mA *	100	-	
		V_{CE}=2V, I_C=350mA *	100	300	
Transition Frequency	f_T	I_C=200mA, V_{CE}=5V, f=20MHz	50	500	MHz
Collector-Base Capacitance	C_{CB}			20	pF

* Measured under pulsed conditions, Pulse width=300 μs, Duty cycle ≤2%

Customer Notes:

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.

2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

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