

isc Silicon PNP Power Transistor
2N5743
DESCRIPTION

- Excellent Safe Operating Area
- Low Collector-Emitter Saturation Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

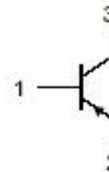
- Designed for general purpose switching and power amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

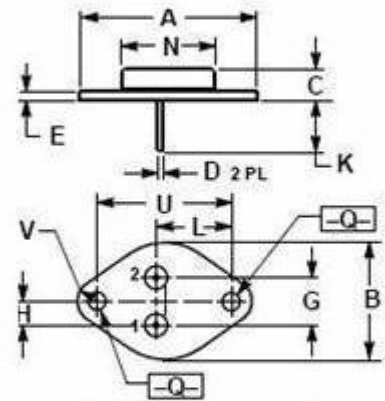
SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	-60	V
V _{CEO}	Collector-Emitter Voltage	-60	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _c	Collector Current-Continuous	-20	A
P _c	Collector Power Dissipation@T _c =25°C	25	W
T _J , T _{stg}	Operating and Storage Junction Temperature Range	-65~+200	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	7	°C/W



PIN 1. BASE
 2. EMITTER
 3. COLLECTOR (CASE)
 TO-66 package



DIM	mm	
	MIN	MAX
A	31.40	31.80
B	17.30	17.90
C	6.70	7.10
D	0.70	0.90
E	1.40	1.80
G	5.08	
H	2.54	
K	9.80	10.50
L	14.70	14.90
N	12.40	12.70
Q	3.60	3.80
U	24.30	24.50
V	3.50	3.70

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = -10A; I _B = -1.0A		-1.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = -20A; I _B = -4.0A		-3.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -10A; I _B = -1.0A		-1.8	V
V _{BE(ON)}	Base-Emitter On Voltage	I _C =-10A; V _{CE} = -5V		-1.5	V
I _{CEO}	Collector Cutoff Current	V _{CE} = -60V; I _B =0		-0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C =0		-0.1	mA
h _{FE-1}	DC Current Gain	I _C = -10A ; V _{CE} = -5V	20	80	
h _{FE-2}	DC Current Gain	I _C = -20A ; V _{CE} = -5V	10		

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