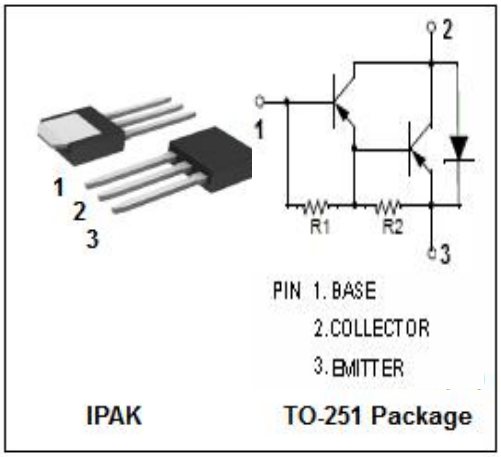
isc Silicon PNP Darlington Power Transistor 2SB963

DESCRIPTION

- With TO-251(IPAK) packaging
- Very high DC current gain
- Monolithic darlington transistor with integrated antiparallel collector-emitter diode
- Complement to type 2SD1286
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

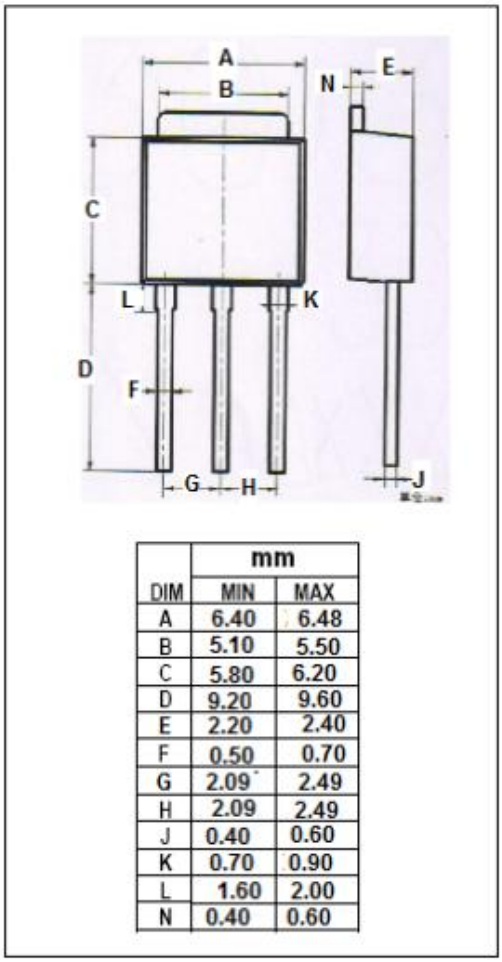
- AC-DC motor control
- Electronic ignition
- Alternator regulator

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-8	V
I_C	Collector Current-Continuous	-1	A
I_{CM}	Collector Current-Peak	-2	A
P_T	Total Power Dissipation	10	W
T_j	Max.Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	62.5	℃/W



DIM	mm MIN	MAX
A	6.40	6.48
B	5.10	5.50
C	5.80	6.20
D	9.20	9.60
E	2.20	2.40
F	0.50	0.70
G	2.09	2.49
H	2.09	2.49
J	0.40	0.60
K	0.70	0.90
L	1.60	2.00
N	0.40	0.60

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= -1mA, I_B= 0	-60		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C=-0.5A ,I_B= -50mA		-1.5	V
$V_{BE(sat)1}$	Base-Emitter Saturation Voltage	I_C=-0.5A ,I_B= -50mA		-2.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}=-60V, I_E= 0		-10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C= 0		-10	μA
h_{FE-1}	DC Current Gain	I_C= -0.2A ; V_{CE}= -2V	1000	-	
h_{FE-2}	DC Current Gain	I_C= -0.5A ; V_{CE}= -2V	6000	30000	