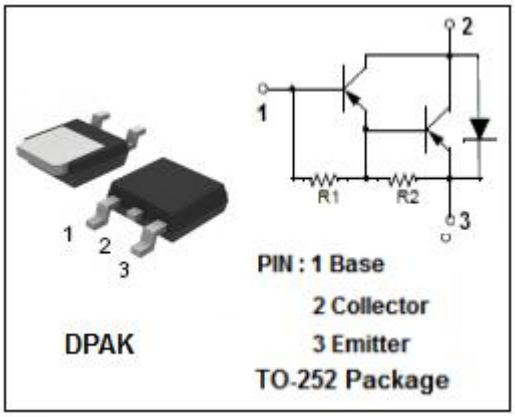
isc Silicon PNP Darlington Power Transistor — ISCD18106



DESCRIPTION

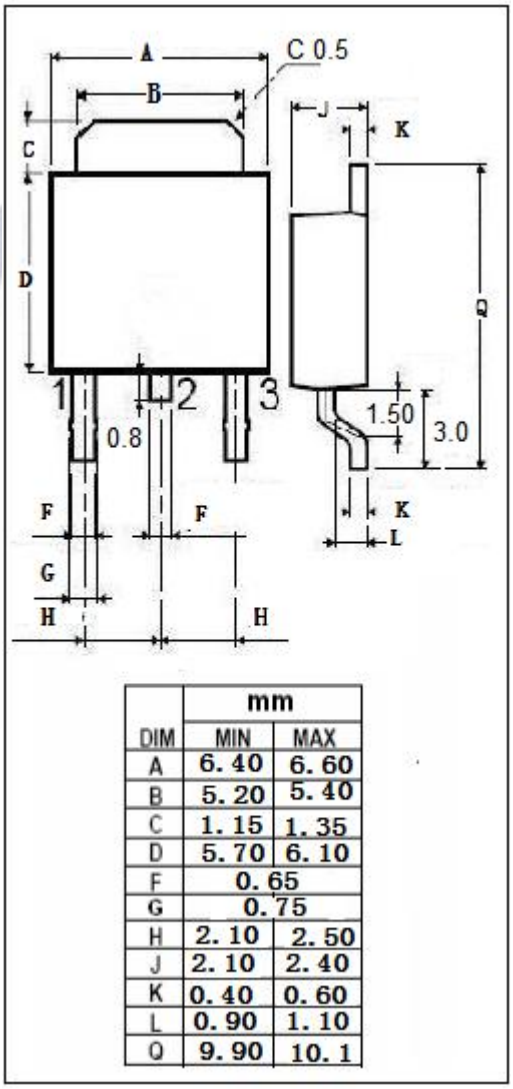
- High DC current gain
- Built-in a damper diode at E-C
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for general purpose amplifier and low speed switching applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-2	A
I_{CP}	Collector Current-Pulse	-4	A
P_C	Collector Power Dissipation Ta=25℃	1.75	W
P_C	Collector Power Dissipation T_C=25℃	20	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
H	2.10	2.50
J	2.10	2.40
K	0.40	0.60
L	0.90	1.10
Q	9.90	10.1

Download from alldatasheet.com

isc Silicon PNP Darlington Power Transistor ISCD18106

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)-1}$*	Collector-Emitter Saturation Voltage	I_C= -2A; I_B=- 8mA			-2.0	V
$V_{CE(sat)-2}$*	Collector-Emitter Saturation Voltage	I_C= -4A; I_B=- 40mA			-3.0	V
$V_{BE(sat)}$*	Base-Emitter Saturation Voltage	I_C=- 4A; I_B=- 40mA			-4.0	V
$V_{BE(on)}$*	Base-Emitter On Voltage	I_C=-2A; V_{CE}=-3V			-2.8	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -30mA; I_B= 0	-100			V
I_{CBO}	Collector Cutoff Current	V_{CB}=- 50V; I_E= 0			-20	uA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C= 0			-2	mA
h_{FE-1}*	DC Current Gain	I_C=-0.5A; V_{CE}= -3V	500			
h_{FE-2}*	DC Current Gain	I_C= -2A; V_{CE}=-3V	1K		12K	
h_{FE-3}*	DC Current Gain	I_C=- 4A; V_{CE}=-3V	200			
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= -10V; f= 1.0MHz		200		pF
f_T	Current-Gain—Bandwidth Product	I_C= -0.75A; V_{CE}= -10V		25		MHz

*:Pulse test PW≤300us,duty cycle≤2%

Download from alldatasheet.com