

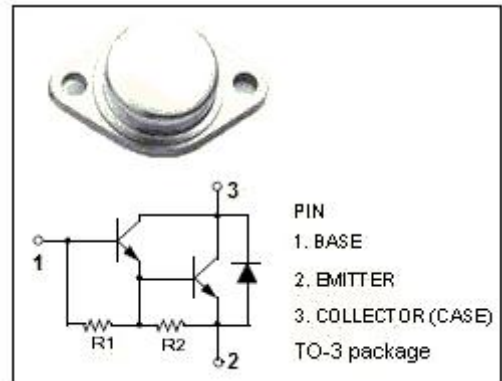
SPTECH Silicon NPN Darlington Power Transistor MJ11016

DESCRIPTION

- Collector-Emitter Breakdown Voltage
: $V_{(BR)CEO} = 120V(\text{Min.})$
- High DC Current Gain-
: $h_{FE} = 1000(\text{Min.})@I_C = 20A$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = 3.0V(\text{Max.})@I_C = 20A$
- Complement to the PNP MJ11015

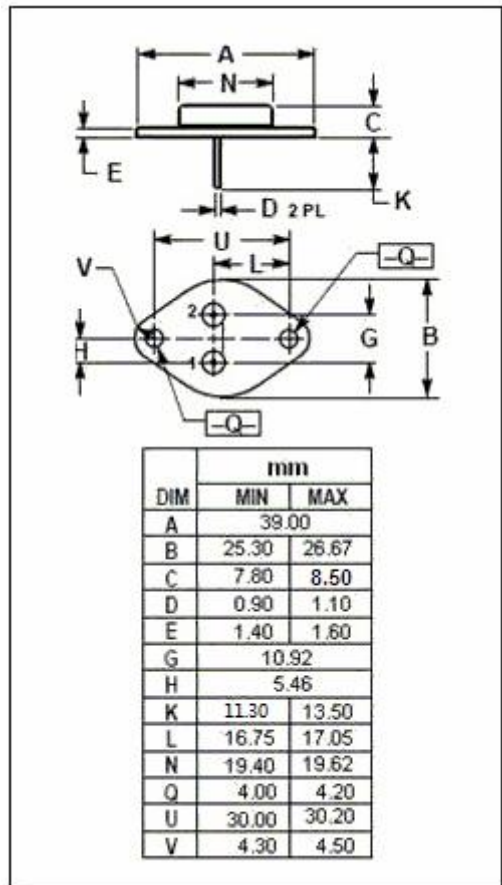
APPLICATIONS

- Designed for use as output devices in complementary general purpose amplifier applications.



ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	120	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	30	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	200	W
T_j	Junction Temperature	200	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~+200	$^\circ\text{C}$



THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.87	$^\circ\text{C/W}$

SPTECH Silicon NPN Darlington Power Transistor MJ11016

ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _c = 50mA; I _B = 0	120			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _c = 20A; I _B = 0.2A			3.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _c = 30A; I _B = 0.3A			4.0	V
V _{BE(sat)-1}	Base-Emitter Saturation Voltage	I _c = 20A; I _B = 0.2A			3.5	V
V _{BE(sat)-2}	Base-Emitter Saturation Voltage	I _c = 30A; I _B = 0.3A			5.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} =120V; I _E =0 V _{CB} =120V; I _E =0; T _c =150°C			1.0 5.0	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 120V; I _B = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			5.0	mA
h _{FE-1}	DC Current Gain	I _c = 20A, V _{CE} = 5V	1000			
h _{FE-2}	DC Current Gain	I _c = 30A, V _{CE} = 5V	200			

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bipolar Transistors - BJT category](#):

Click to view products by [SPTECH manufacturer](#):

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MJ15024/WS](#) [MJ15025/WS](#) [BC546/116](#) [BC556/FSC](#) [BC557/116](#) [BSW67A](#) [HN7G01FU-A\(T5L,F,T](#)
[NJVMJD148T4G](#) [NSVMMBT6520LT1G](#) [NTE187A](#) [NTE195A](#) [NTE2302](#) [NTE2330](#) [NTE2353](#) [NTE316](#) [IMX9T110](#) [NTE63](#) [NTE65](#)
[C4460](#) [SBC846BLT3G](#) [2SA1419T-TD-H](#) [2SA1721-O\(TE85L,F\)](#) [2SA1727TLP](#) [2SA2126-E](#) [2SB1202T-TL-E](#) [2SB1204S-TL-E](#) [2SC5488A-](#)
[TL-H](#) [2SD2150T100R](#) [SP000011176](#) [FMC5AT148](#) [2N2369ADCSM](#) [2SB1202S-TL-E](#) [2SC2412KT146S](#) [2SC4618TLN](#) [2SC5490A-TL-H](#)
[2SD1816S-TL-E](#) [2SD1816T-TL-E](#) [CMXT2207 TR](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [BC557B](#) [TTC012\(Q\)](#) [BULD128DT4](#) [JANTX2N3810](#)
[Jantx2N5416](#) [US6T6TR](#) [KSF350](#) [068071B](#)