

**SPTECH Silicon PNP Darlington Power Transistor FW26025A1**

**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-  
:  $V_{CE(sat)} = -3.0V(\text{Max.})@I_C = -20A$

**APPLICATIONS**

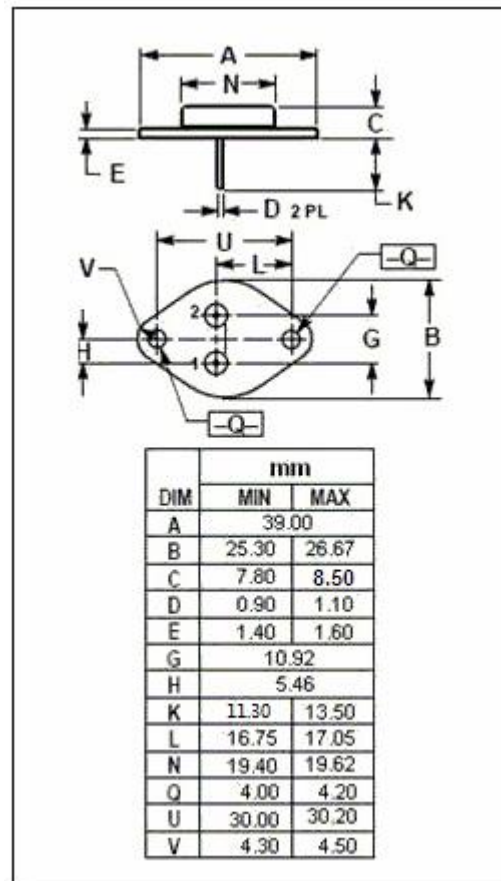
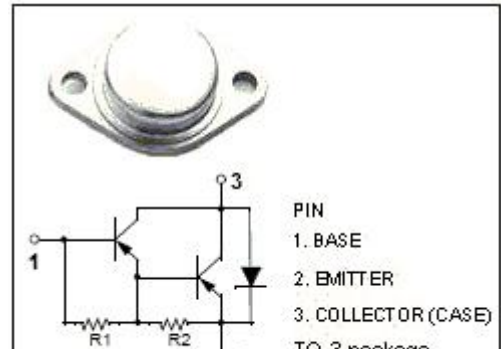
- Designed for use as output devices in complementary general purpose amplifier applications.

**ABSOLUTE MAXIMUM RATINGS (Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	-100	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-100	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current-Continuous	-20	A
I <sub>Cm</sub>	Collector Peak Current	-40	A
P <sub>C</sub>	Collector Power Dissipation @T <sub>C</sub> =25°C	160	W
T <sub>J</sub>	Junction Temperature	200	°C
T <sub>stg</sub>	Storage Temperature Range	-55~+200	°C

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.87	°C/W



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**ELECTRICAL CHARACTERISTICS**

$T_c=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -50\text{mA}; I_B = 0$	-120			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C = -20\text{A}; I_B = -0.2\text{A}$			-3.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C = -30\text{A}; I_B = -0.3\text{A}$			-4.0	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	$I_C = -20\text{A}; I_B = -0.2\text{A}$			-3.5	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	$I_C = -30\text{A}; I_B = -0.3\text{A}$			-5.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -120\text{V}; I_E = 0$ $V_{CB} = -120\text{V}; I_E = 0; T_c = 150^{\circ}\text{C}$			-1.0 -5.0	mA
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = -120\text{V}; I_B = 0$			-1.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$			-5.0	mA
$h_{FE-1}$	DC Current Gain	$I_C = -20\text{A}, V_{CE} = -5\text{V}$	1000			
$h_{FE-2}$	DC Current Gain	$I_C = -30\text{A}, V_{CE} = -5\text{V}$	200			