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SPC-F005.DWG

N,	REVISIONS			DOC. NO. SPC-F005 * Effective: 7/8/02 * DCP No: 1398						
	DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE	
	1885	Α	RELEASED	EO	02/03/06	но	2/6/06	JWM	2/6/06	

PNP



Description: Silicon TO-126, PNP Power Transistor for use in power amplifier and switching excellent safe area limits.

Absolute Maximum Ratings:

- Collector-Base Voltage, $V_{CBO}=80V$ Collector-Emitter Voltage, $V_{CEO}=80V$ Emitter-Base Voltage, $V_{EBO}=5V$ Continuous Collector Current, $I_{C}=4A$ Base Current = 1A

- Total Device Dissipation ($T_C = +25^{\circ}C$), $P_D = 40W$ Derate above $25^{\circ}C = 320 \text{mW/}^{\circ}C$

- Operating Junction Temperature Range, $T_J = -65^\circ$ to +150°C Storage Temperature Range, $T_{\rm stg} = -65^\circ$ to +150°C

Electrical Characteristics: $(T_A = +25^{\circ}C \text{ unless otherwise specified})$

Parameter	Symbol	Test Conditions	Min	Max	Unit						
OFF Characteristics											
Collector—Emitter Breakdown Voltage	V _{(BR)CEO}	$I_{C} = 100 \text{mA}, I_{B} = 0, \text{ (Note 1)}$	80	-	٧						
Collector Cut-Off Current	I _{CEO}	V_{CE} = 80V, I_{E} = 0		1	mA						
Collector Cut-Off Current	I _{CEX}	$V_{CE} = 80V, V_{EB(off)} = 1.5V$	-	0.1	mA						
	I_{CBO}	V_{CB} = 80V, I_{E} = 0	-	0.1	mA						
Emitter Cut-Off Current	I _{EBO}	$V_{EB} = 5V, I_{C} = 0$	-	1	mA						
ON Characteristics											
DC Current Gain (Note 1)	h _{FE}	$V_{CE} = 2V, I_{C} = 1.5A$	20	80	-						
		$V_{CE} = 2V, I_{C} = 4A$	7	-	-						
Collector—Emitter Saturation Voltage	V _{CE(sat)}	$I_{C} = 1.5A, I_{B} = .15mA$	-	0.6	V						
(Note 1)		$I_{\mathbf{C}}$ = 4A, $I_{\mathbf{B}}$ = 1A	-	1.4	V						
Base—Emitter On Voltage (Note 1)	V _{BE(on)}	$I_C = 1.5A$, $V_{CE} = 2V$		1.2	٧						
Small-Signal Characteristics											
Current Gain-Bandwidth Product	f _T	V_{CE} = 10V, I_{C} = 1A, f = 1MHz	2	-	MHz						
Note 1 Dules Test, Dules Width < 700cs Duty Code < 297											

Dim Min Max 10.80 11.05 A 7.49 7.75 С 2.41 2.67 D 0.51 0.66 **F** 2.92 3.18 G 2.31 2.46 1.27 2.41 Н J 0.38 0.64 15.11 16.64 3° TYP M Q 3.76 4.01 1.14 1.40 0.64 0.89 U 3.68 3.94 v 1.02 STYLE 1 PIN 1. EMITTER 2. COLLECTOR 3. BASE J -- | |--|||--| |--- D 3 COLLECTOR 2 BASE 1 EMITTER

Note 1. Pulse Test: Pulse Width \leq 300 μ s, Duty Cycle \leq 2%.

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ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED
HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE
BELIEVE TO BE ACCURATE AND RELABLE. SINCE
CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE
USER SHALL DETERMINE THE SUITABLITY OF THE PRODUCT
FOR THE INTENDED USE AND ASSUME ALL RISK AND
LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY: DATE: 02/03/06 EKLAS ODISH CHECKED BY: DATE: HISHAM ODISH 2/6/06 APPROVED BY: DATE: 2/6/06 JEFF MCVICKER

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