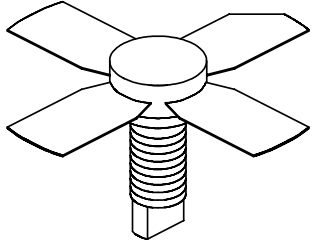


UMIL 10

100 Watts, 28 Volts, Class AB or C
Defcom 100 - 400 MHz

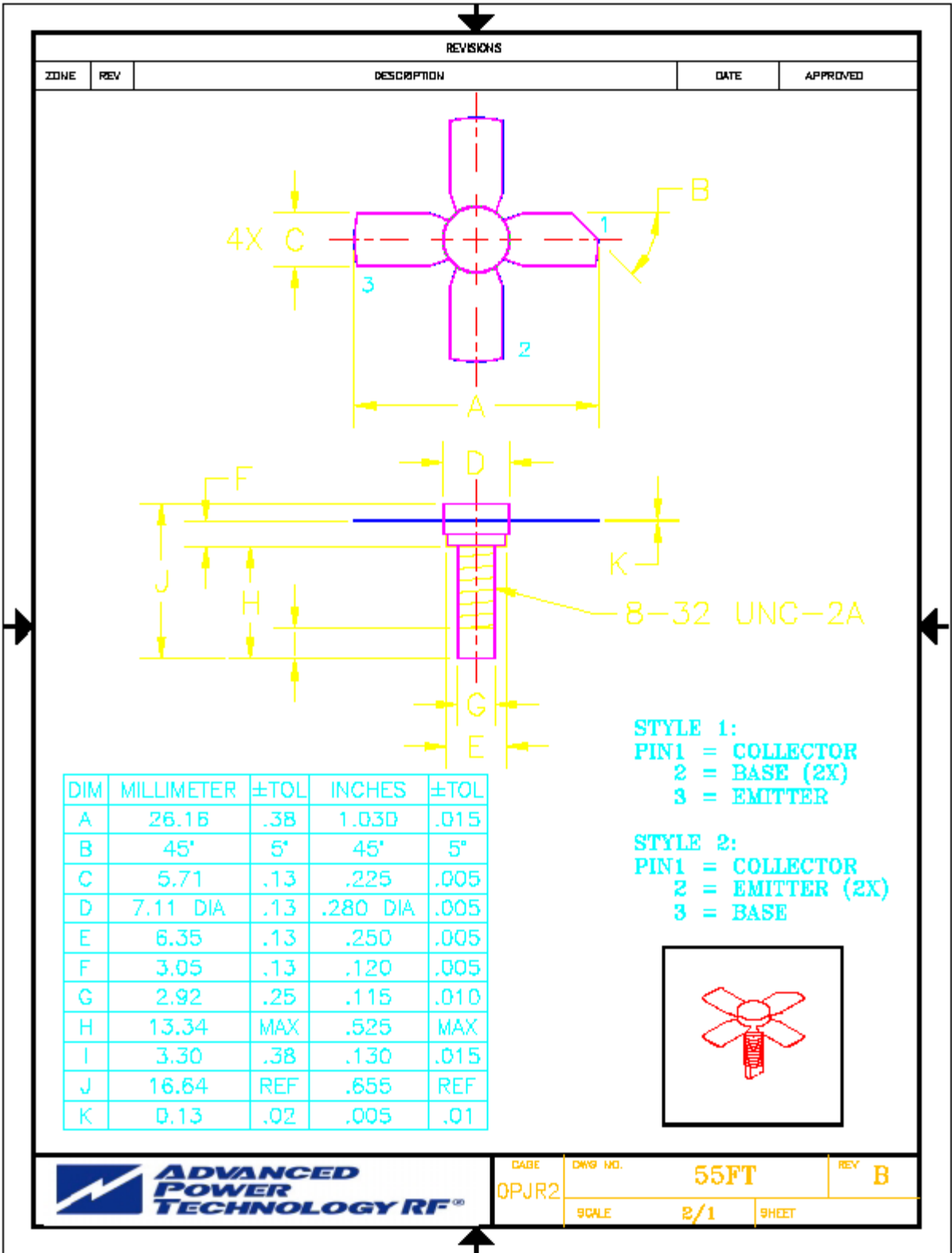
<p>GENERAL DESCRIPTION</p> <p>The UMIL10 is a COMMON EMITTER broadband transistor specifically intended for use in the 100-400 MHz frequency band. It may be operated in Class AB or C. Gold metallization and silicon diffused resistors ensure ruggedness and high reliability.</p>	<p style="text-align: center;">CASE OUTLINE 55FT, Style 2</p> 
<p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation @ 25°C 28 Watts</p> <p>Maximum Voltage and Current</p> <p>BVces Collector to Emitter Voltage 55 Volts BVebo Emitter to Base Voltage 4.0 Volts Ic Collector Current 1.5 A</p> <p>Maximum Temperatures</p> <p>Storage Temperature - 65 to +150°C Operating Junction Temperature +200°C</p>	

ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Output	F = 400 MHz Vcc = 28 Volts Class C Bias	10			Watts
Pin	Power Input				1.0	Watts
Pg	Power Gain			10.0		dB
ηc	Efficiency				60	%
VSWR	Load Mismatch Tolerance					30:1

BVebo	Emitter to Base Breakdown	Ie = 5 mA	4.0			Volts
BVces	Collector to Emitter Breakdown	Ic = 50 mA	55			Volts
BVceo	Collector to Emitter Breakdown	Ie = 50 mA	30			Volts
Cob	Output Capacitance	Vcb = 28 V, F = 1 MHz		11.5		pF
hFE	DC - Current Gain	Vce = 5 V, Ic = 200 mA	10			
θjc	Thermal Resistance				6.3	°C/W

Rev. A : August 2005



Advanced Power Technology reserves the right to change, without notice, the specifications and information contained herein. Visit our web site at www.advancedpower.com or contact our factory direct.