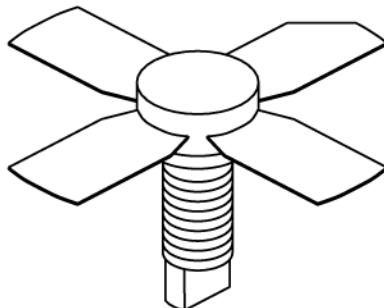


UMIL 3

3 Watts, 28 Volts, Class AB
Defcom 225 - 400 MHz

<p>GENERAL DESCRIPTION</p> <p>The UMIL3 is a COMMON EMITTER broadband transistor specifically intended for use in the 225-400 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>CASE OUTLINE 55FT, Style 2</p> 
<p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation @ 25°C 11 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 0.7 A</p> <p>Maximum Temperatures</p> <p>Storage Temperature - 65 to +150°C Operating Junction Temperature +150°C</p>	

ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P _{out}	Power Output	F = 400 MHz	3			Watts
P _{in}	Power Input	V _{cc} = 28 Volts			0.2	Watts
P _g	Power Gain		11.8	13		dB
η _c	Efficiency			60		%
V _{SWR}	Load Mismatch Tolerance				30:1	

BV _{ebo}	Emitter to Base Breakdown	I _e = 5 mA	4.0			Volts
BV _{ces}	Collector to Emitter Breakdown	I _c = 20 mA	55			Volts
BV _{ceo}	Collector to Emitter Breakdown	I _e = 50 mA	30			Volts
C _{ob}	Output Capacitance	V _{cb} = 28 V, F = 1 MHz		4.5		pF
h _{FE}	DC - Current Gain	V _{ce} = 5 V, I _c = 100 A	10	45	150	
θ _{jc}	Thermal Resistance				16	°C/W

Issue August 1996