

# SILICON STEP RECOVERY DIODE

**DESCRIPTION:**

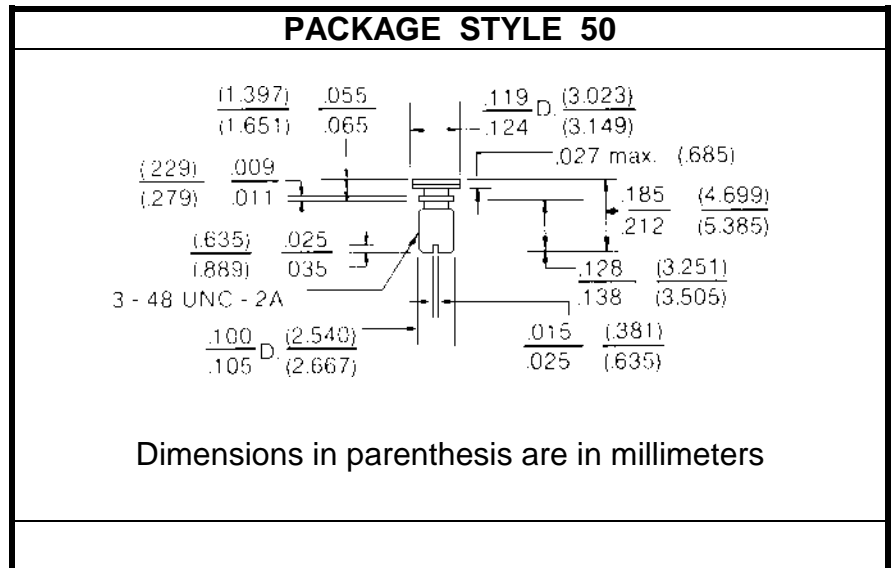
The **ASI 5082-0800** is a Silicon Step Recovery Diode Designed as a Frequency Multiplier with S-Band Output Frequencies.

**FEATURES INCLUDE:**

- Replacement for **HP 5082-0800**
- $P_{OUT} = 10\text{ W typ. @ } 4\text{ GHz (X 2)}$
- Hermetic Package

**MAXIMUM RATINGS**

$I_F$	100 mA
$P_{DISS}$	7.0 W @ $T_C = 25\text{ }^\circ\text{C}$
$T_J$	-65°C to +150 °C
$T_{STG}$	-65°C to +150 °C
$\theta_{JC}$	15 °C/W


**CHARACTERISTICS**  $T_A = 25\text{ }^\circ\text{C}$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$V_{BR}$	$I_R = 10\text{ }\mu\text{A}$	75			V
$C_{j6}$	$V_R = 6\text{ V}$ $f = 1.0\text{ MHz}$	3.5		5.0	pF
$f_c$		100			GHz
$\tau$	$I_F = 10\text{ mA}$ $I_R = 6\text{ mA}$	200			$\mu\text{S}$
$t_t$	Charge Level = 1000 pC, measured at 20% & 80% points			400	pS