

SILICON STEP RECOVERY DIODE

DESCRIPTION:

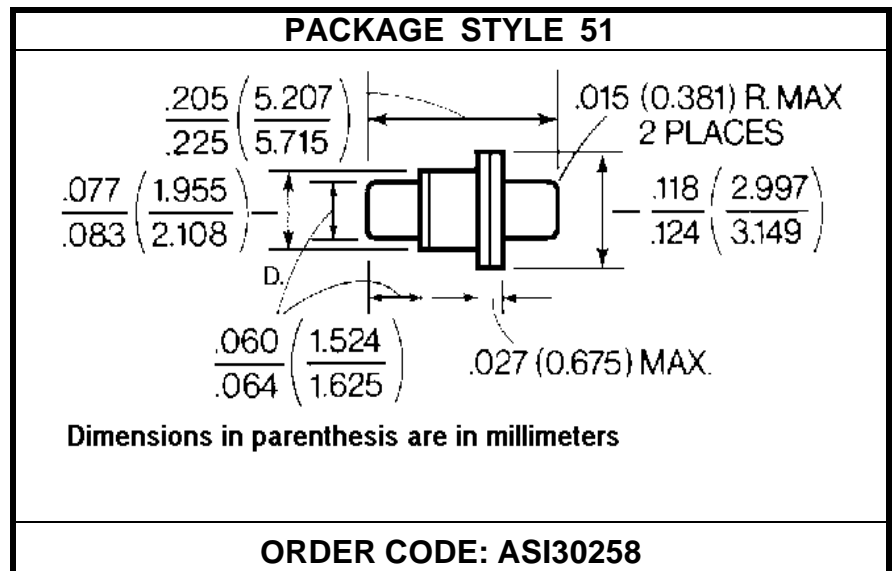
The **ASI 5082-0810** is a Silicon Step Recovery Diode Designed as a Frequency Multiplier with S-Band Output Frequencies.

FEATURES INCLUDE:

- Replacement for **HP 5082-0810**
- $P_{OUT} = 4 \text{ W typ. @ } 4 \text{ GHz (X 2)}$
- Hermetic Coaxial Package

MAXIMUM RATINGS

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



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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V_{BR}	$I_R = 10 \mu\text{A}$	60			V
C_{j6}	$V_R = 6 \text{ V}$ $f = 1.0 \text{ MHz}$	1.5		2.5	pF
f_c		140			GHz
t	$I_F = 10 \text{ mA}$ $I_R = 6 \text{ mA}$	80			nS
t_t	Charge Level = 1000 pC, measured at 20% & 80% points			260	pS