

SILICON STEP RECOVERY DIODE

DESCRIPTION:

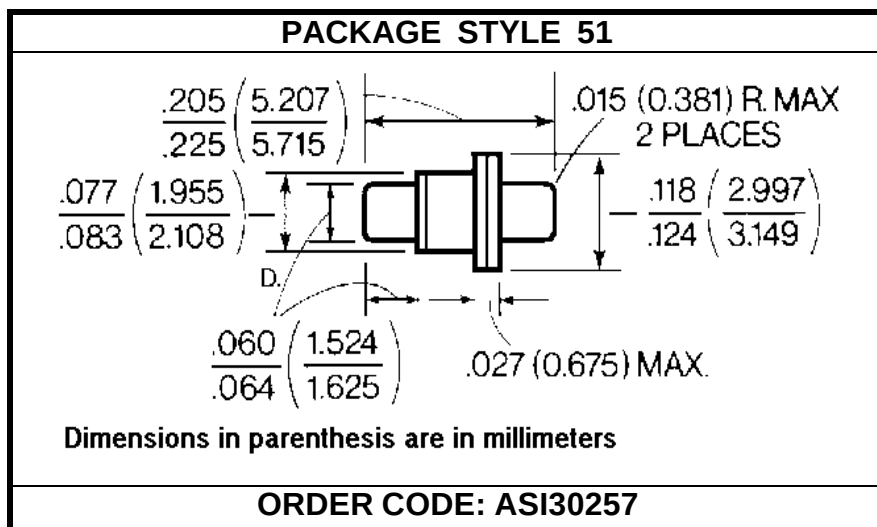
The **ASI 5082-0335** is a Silicon Step Recovery Diode Designed as a X 8 Frequency Multiplier with X-Band Output Frequencies.

FEATURES INCLUDE:

- Replacement for **HP 5082-0335**
- $P_{OUT} = 30 \text{ mW min. @ } 16 \text{ GHz (X 8)}$
- Hermetic Coaxial Package

MAXIMUM RATINGS

I_F	100 mA
P_{DISS}	2.3 W @ $T_C = 25^\circ\text{C}$
T_J	$-65^\circ\text{C to } +150^\circ\text{C}$
T_{STG}	$-65^\circ\text{C to } +150^\circ\text{C}$
q_{JC}	75°C/W



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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V_{BR}	$I_R = 10 \mu\text{A}$	20		30	V
C_{j6}	$V_R = 0 \text{ V}$ $f = 1.0 \text{ MHz}$	0.25		0.5	pF
t	$I_F = 10 \text{ mA}$ $I_R = 6 \text{ mA}$		15		ns
t_t	Charge Level = 100 pC, measured at 20% & 80% points		60		pS
P_{OUT}	$P_{IN} = 0.65 \text{ W}$ $F_{IN} = 2 \text{ GHz}$ $F_{OUT} = 16 \text{ GHz}$	30			mW