

SURFACE MOUNT STEP RECOVERY DIODE

DESCRIPTION:

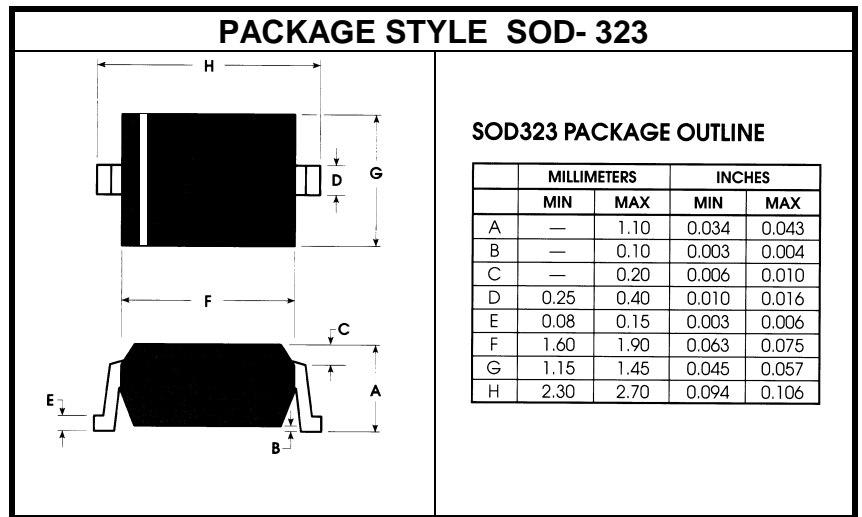
The **ASRD 800** Series of Step Recovery Diodes are Designed for Synthesiser and Sampler Applications Requiring a High Performance to Cost Ratio.

FEATURES INCLUDE:

- Transition Time as Low as **70 pS**
- Surface Mount **SOD323** Package

MAXIMUM RATINGS

I_F	50 mA
V_R	UP TO RATED V _{BR}
P_{DISS}	100 mW
T_J	-55 to +150 °C
T_{STG}	-55 to +150 °C
θ_{JC}	1.25 °C /mW



STATIC ELECTRICAL CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
V_{BR}	I _R = 10 μA	ASRD 803		15			V
		ASRD 806		20			
		ASRD 808		25			
		ASRD 814		40			
		ASRD 820		50			
		ASRD 830		60			
C_{J6}	V _R = 6 V	f = 1 MHz	ASRD 803	0.2		0.4	pF
			ASRD 806	0.4		0.8	
			ASRD 808	0.5		1.0	
			ASRD 814	1.0		1.7	
			ASRD 820	1.5		2.5	
			ASRD 830	2.5		3.5	



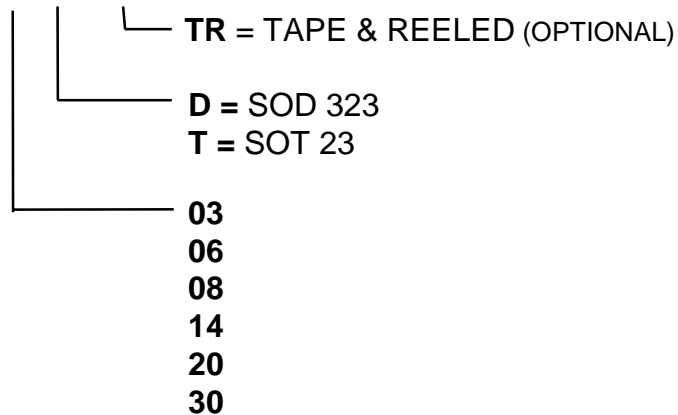
SURFACE MOUNT STEP RECOVERY DIODE

DYNAMIC ELECTRICAL CHARACTERISTICS $T_C = 25\text{ }^\circ\text{C}$

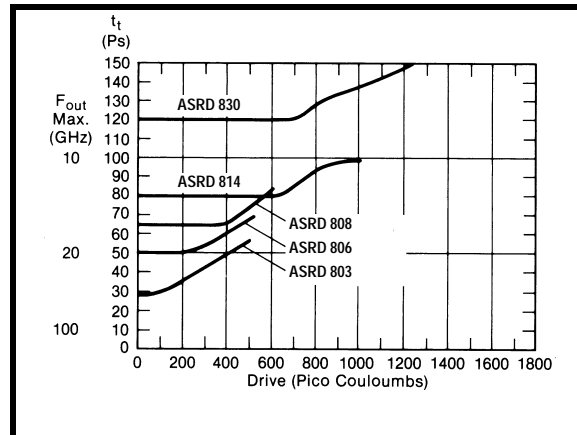
SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
τ	$I_F = 10\text{ mA}$	$I_R = 6\text{ mA}$	ASRD 803	8	10		nS
			ASRD 806	10	12		
			ASRD 808	25	30		
			ASRD 814	45	60		
			ASRD 820	55	70		
			ASRD 830	80	100		
			T_t	$V_R = 7\text{ V}$	$I_F = 3\text{ mA}$	ASRD 803	
ASRD 806		85				100	
ASRD 808		90				110	
ASRD 814		110				135	
ASRD 820		200				250	
ASRD 830		250				300	

ORDERING INFORMATION:

ASRD 8XXX-XX



SURFACE MOUNT STEP RECOVERY DIODE



PACKAGE STYLE SOT-23

1 = Anode 2 = NC 3 = Cathode

SOT23 PACKAGE OUTLINE

	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.79	1.02	.031	.040
A ₁	0.02	0.10	.001	.004
C	2.67	3.05	.105	.120
E	1.80	2.00	.071	.079
F	0.38	0.54	.01	.021
G	2.10	2.50	.083	.098
H	1.20	1.40	.047	.055
I	0.13	0.25	.005	.010
J	0.089	0.15	.0035	.0059
K	0.44	0.55	.017	.022
∅	0	8	0	0