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.

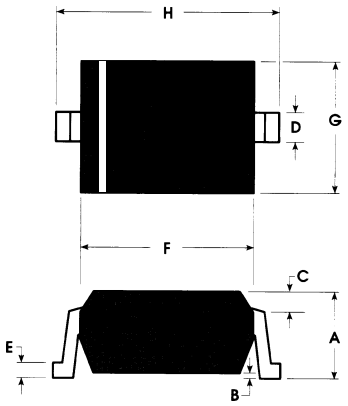
FEATURES INCLUDE:

- 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 ^{O}C
T_{STG}	-55 to +150 ^{O}C
θ_{JC}	1.25 ^{O}C /mW

PACKAGE STYLE SOD- 323



SOD323 PACKAGE OUTLINE

	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	—	1.10	0.034	0.043
B	—	0.10	0.003	0.004
C	—	0.20	0.006	0.010
D	0.25	0.40	0.010	0.016
E	0.08	0.15	0.003	0.006
F	1.60	1.90	0.063	0.075
G	1.15	1.45	0.045	0.057
H	2.30	2.70	0.094	0.106

STATIC ELECTRICAL CHARACTERISTICS $T_C = 25\ ^{O}C$

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	

Specifications are subject to change without notice.

SURFACE MOUNT STEP RECOVERY DIODE

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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
τ	I_F = 10 mA	I_R = 6 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 V	I_F = 3 mA	ASRD 803		70	85	**pS**
			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

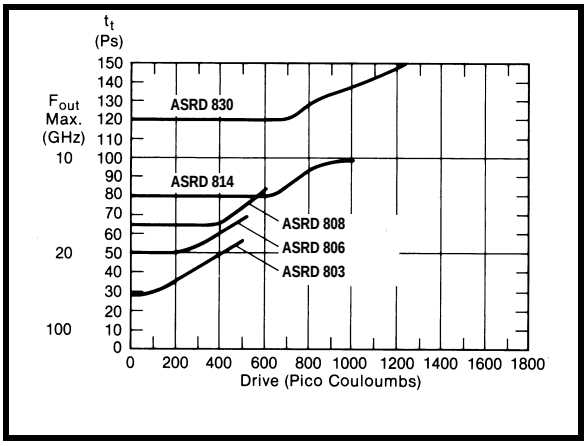
TR = TAPE & REELED (OPTIONAL)

D = SOD 323
T = SOT 23

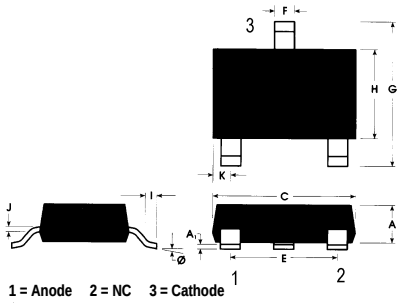
03
06
08
14
20
30

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SURFACE MOUNT STEP RECOVERY DIODE



PACKAGE STYLE SOT-23



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
Ø	0	8	0	0

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