Micro Commercial Components
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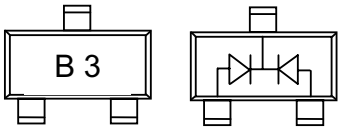
1SS184

150mW High Speed Switching Diodes 80 Volt

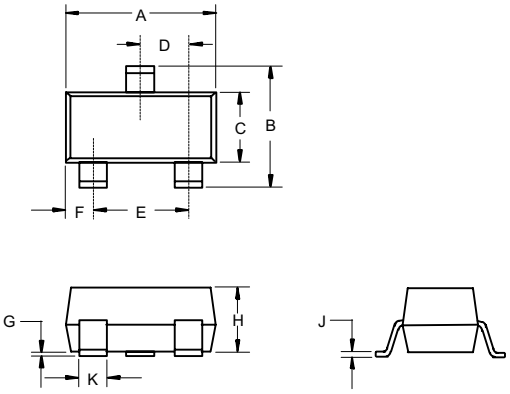
Features

- Halogen free available upon request by adding suffix "-HF"
- Low Forward Voltage
- Low Leakage Current
- Surface Mount SOT-23 Package
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Pin Configuration Top View

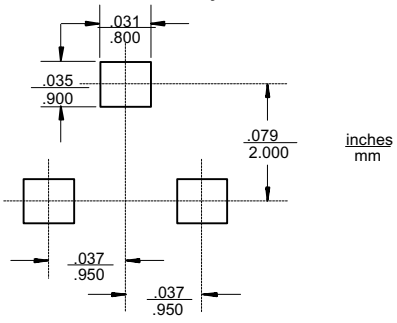


SOT-23



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout



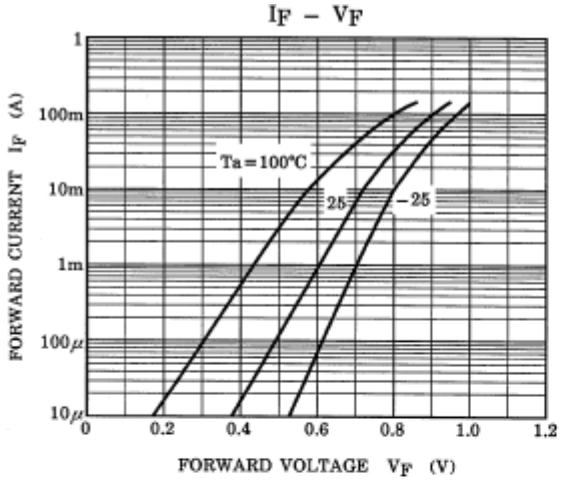
Maximum Ratings

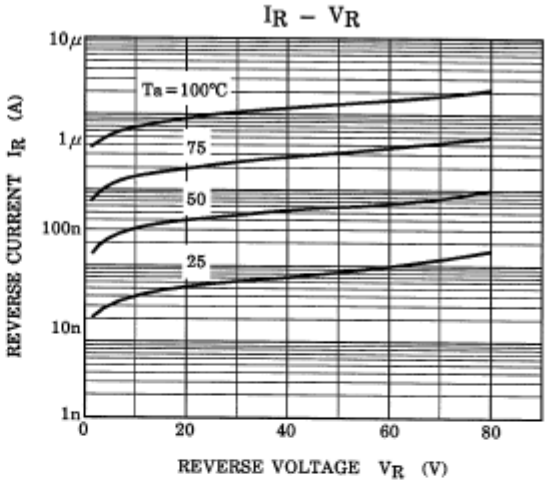
Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	85	V
Reverse Voltage	V_R	80	V
Average Rectified Output Current	I_O	100	mA
Forward Continuous Current	I_{FM}	300	mA
Power Dissipation @ T_A=25℃	P_D	150	mW
Storage Temperature Range	T_{stg}	-55 to +125	℃
Junction Temperature	T_j	125	℃

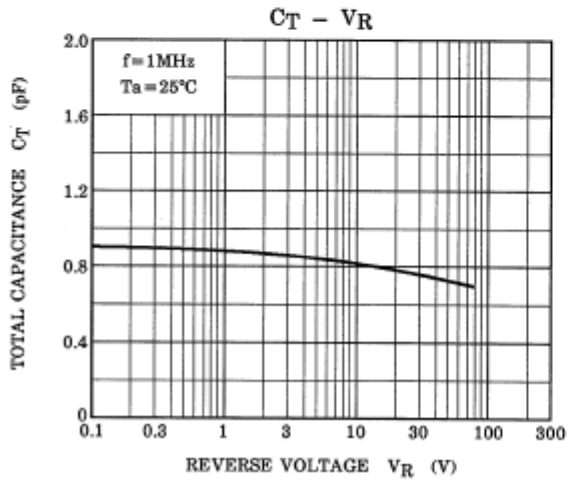
Electrical Characteristics @ 25℃ Unless Otherwise Specified

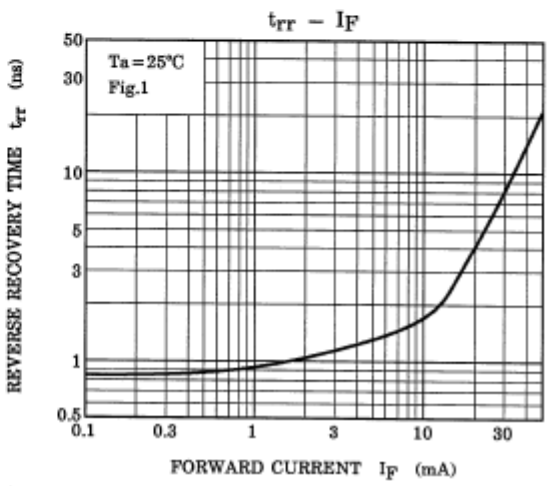
Parameter	Symbol	Min.	Typ.	Max.	Unit
Minimum Reverse Breakdown Voltage (I_R=100μA)	$V_{(BR)}$	80	---	---	V
Maximum Forward Voltage (I_F = 1mA) (I_F = 10mA) (I_F = 100mA)	V_F	--- --- ---	0.60 0.72 0.90	--- --- 1.2	V
Maximum Reverse Voltage Leakage Current (V_R=30V) (V_R=80V)	I_R	--- ---	--- ---	0.1 0.5	μA
Capacitance between Teminals*	C_T	---	0.9	3.0	pF
Maximum Reverse Recovery Time (I_F = I_R=10mA, I_{rr}=0.1×I_R)	t_{rr}	---	1.6	4.0	ns

* Measured at f=1.0MHz, V_R=0


IF – VF
FORWARD CURRENT IF (A)
1
100m
10m
1m
100μ
10μ
Ta=100°C
25
–25
0
0.2
0.4
0.6
0.8
1.0
1.2
FORWARD VOLTAGE VF (V)


IR – VR
REVERSE CURRENT IR (A)
10μ
1μ
100n
10n
1n
Ta=100°C
75
50
25
0
20
40
60
80
REVERSE VOLTAGE VR (V)


CT – VR
TOTAL CAPACITANCE CT (pF)
2.0
1.6
1.2
0.8
0.4
0
f=1MHz
Ta=25°C
0.1
0.3
1
3
10
30
100
300
REVERSE VOLTAGE VR (V)


trr – IF
REVERSE RECOVERY TIME trr (ns)
50
30
10
5
3
1
0.5
Ta=25°C
Fig.1
0.1
0.3
1
3
10
30
FORWARD CURRENT IF (mA)

Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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