

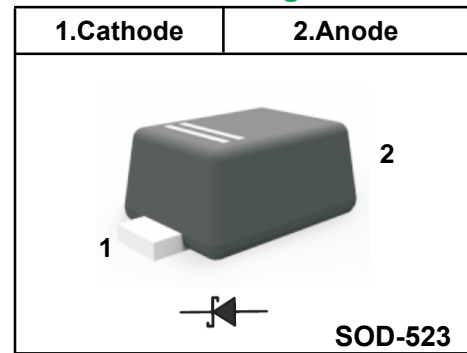
**Plastic-Encapsulate Diodes**

SCHOTTKY BARRIER DIODE

**FEATURES**

- ◆ For low-loss, fast-recovery, meter protection, bias isolation and clamping application
- ◆ Integrated diffused guard ring
- ◆ Low forward

**Pinning**



**Marking Code**

BAT64X	t
--------	---

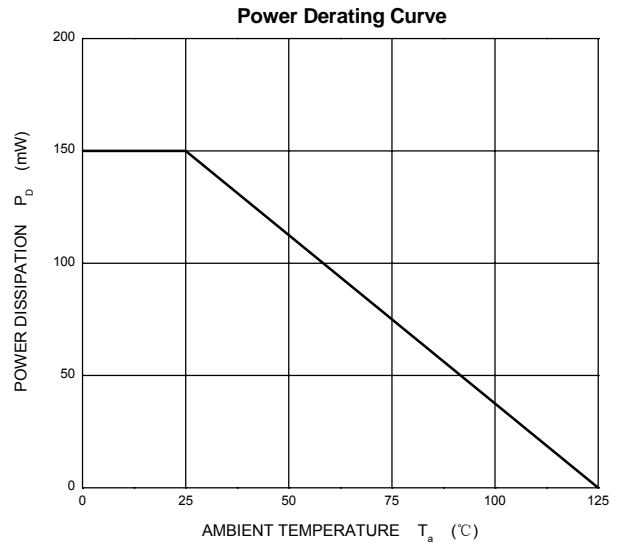
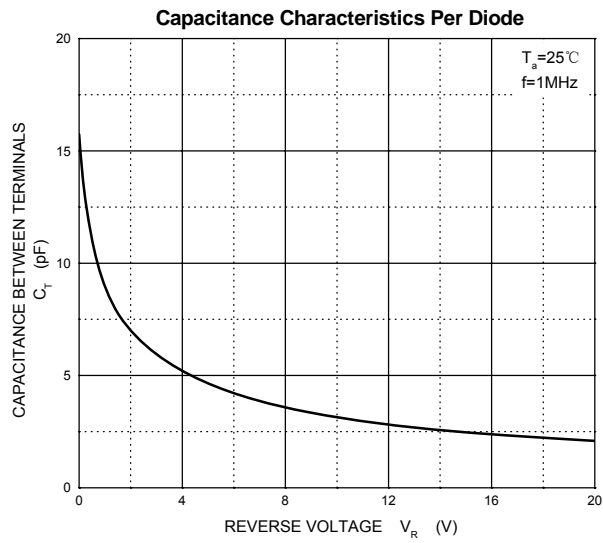
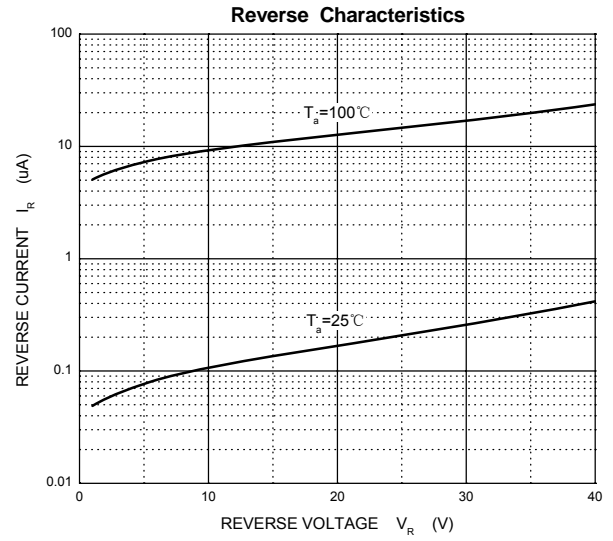
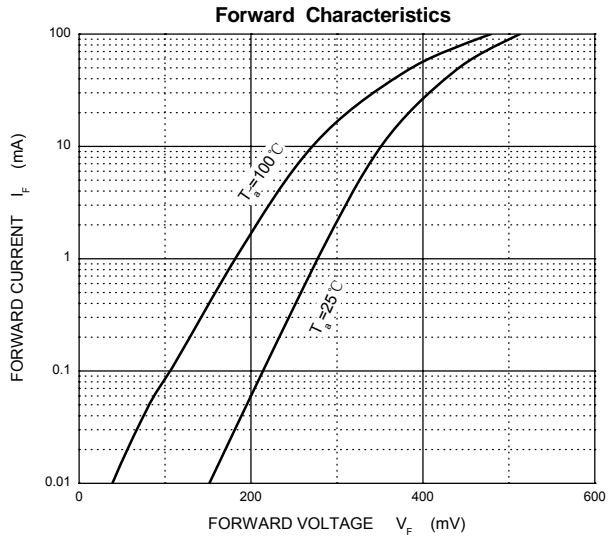
**Maximum Ratings (Ta=25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Peak reverse voltage DC reverse	$V_{RM}$ $V_R$	40	V
Non-repetitive Peak surge forward current @t=8.3ms	$I_{FSM}$	0.8	A
Mean rectifying current	$I_O$	0.25	A
Power Dissipation	$P_D$	150	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	667	°C/W
Operating Junction Temperature Range	$T_j$	-40~+125	°C
Storage Temperature Range	$T_{stg}$	-55~+150	°C

**Electrical Ratings (Ta=25°C unless otherwise noted)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_R$	40			V	$I_R=10\mu A$
Forward voltage	$V_F$			350 430 520 750	mV	$I_F=1mA$ $I_F=10mA$ $I_F=30mA$ $I_F=100mA$
Reverse current	$I_R$			2	$\mu A$	$V_R=30V$
Capacitance between terminals	$C_T$			6	pF	$V_R=1V, f=1MHz$
Reverse recovery time	$t_{rr}$			5	ns	$I_F=10mA, I_R=10mA,$ $I_R=1mA, R_L=100\Omega$

Typical Characteristics



**Ordering information**

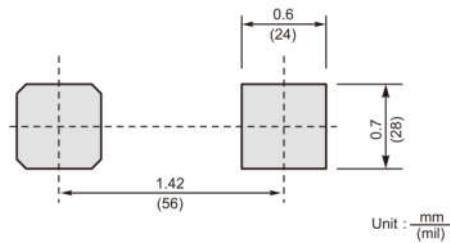
Package	Packing Description	Packing Quantity
SOD-523	Tape/Reel, 7"reel	3000PCS/Reel 120000PCS/Carton

**Package Dimensions**

**SOD-523**

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.51	0.77	20	30
e	0.25	0.35	10	14
C	0.08	0.15	3	6
D	1.10	1.30	43	51
E	0.75	0.99	30	39
HE	1.50	1.70	59	67
N	0.35ref		14ref	
L	0.2ref		8ref	
P	R0.1 ALL ROUND		R4.0 ALL ROUND	
∠	10°			

**The recommended mounting pad size**



## Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.