

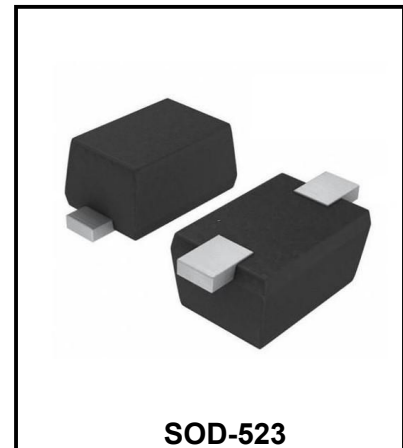
Plastic-Encapsulate Diodes

SCHOTTLKY BARRIER DIODE

FEATURES

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

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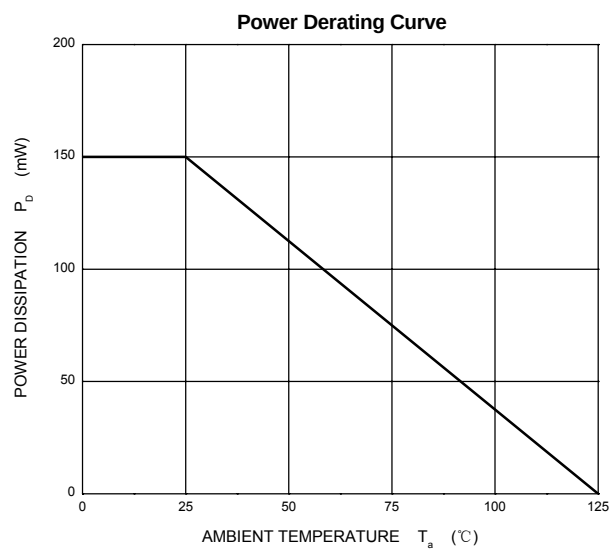
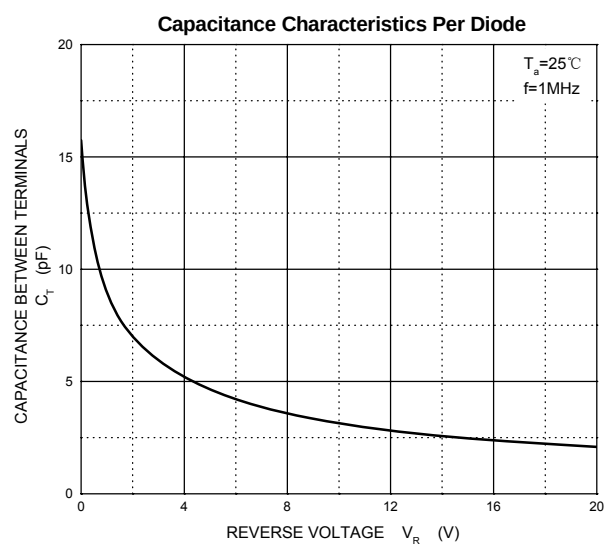
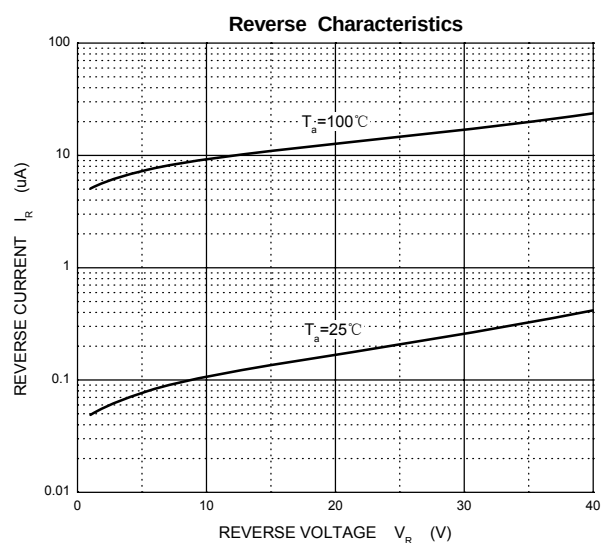
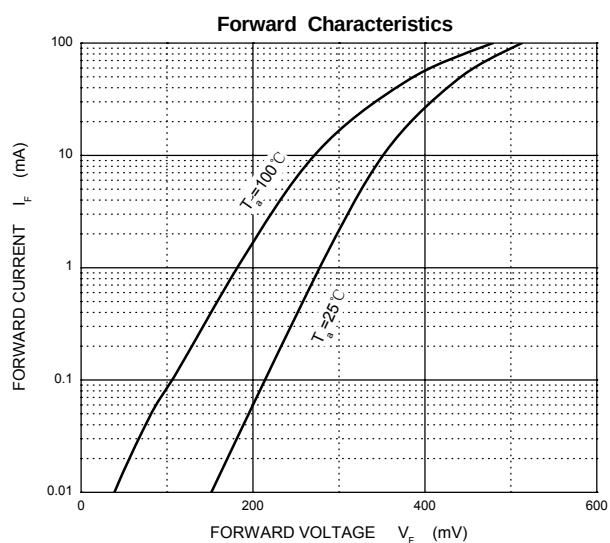
Maximum Ratings (Ta=25°C unless otherwise noted)

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	μA	$V_R=30V$
Capacitance between terminals	C_T			6	pF	$V_R=1V, f=1MHz$
Reverse recovery time	t_{rr}			5	ns	$I_F=10mA, I_R=10mA,$ $I_R=1mA, R_L=100\Omega$

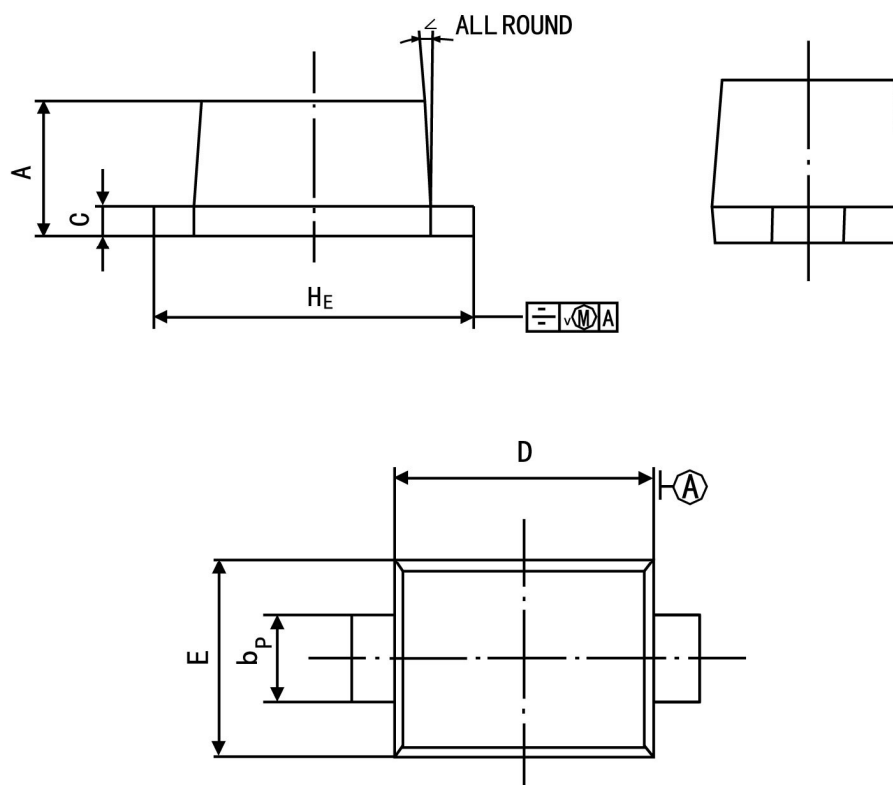
Typical Characteristics



Package Outline

SOD-523

Plastic surface mounted package; 2 leads



Symbol	Dimension in Millimeters	
	Min	Max
A	0.60	0.70
bp	0.30	0.40
C	0.100	0.14
D	1.15	1.25
E	0.75	0.85
HE	1.50	1.70
V	—	0.10

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-523	Tape/Reel, 7" reel	3000	EIA-481-1