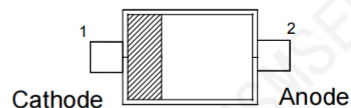


Features

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability



SOD-523

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

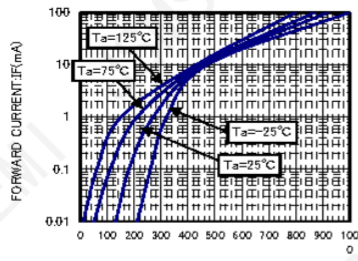
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	40	V
Reverse Voltage	V_R	30	V
Mean Rectifying Current	I_O	30	mA
Peak Forward Surge Current (60 Hz, 1 Cycle)	I_{FSM}	200	mA
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 125	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

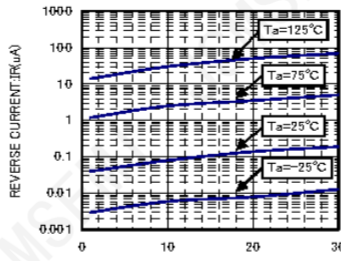
Parameter	Symbol	Typ	Max	Unit
Forward Voltage at $I_F = 1\text{ mA}$	V_F	-	0.37	V
Reverse Current at $V_R = 30\text{ V}$	I_R	-	0.5	μA
Capacitance Between Terminals at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$	C_T	2	-	pF

Note: ESD sensitive product handling required.

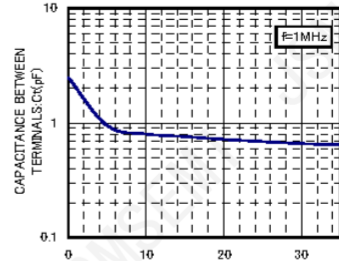
Typical Characteristics



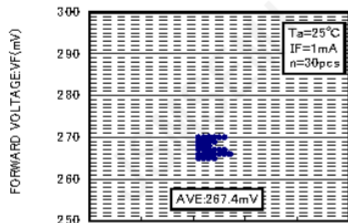
FORWARD VOLTAGE:VF(mV)
VF-IF CHARACTERISTICS
VF分布



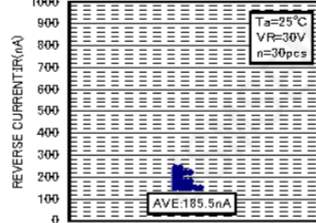
REVERSE VOLTAGE:VR(V)
VR-IR CHARACTERISTICS



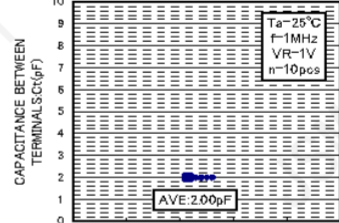
REVERSE VOLTAGE:VR(V)
VR-Ct CHARACTERISTICS



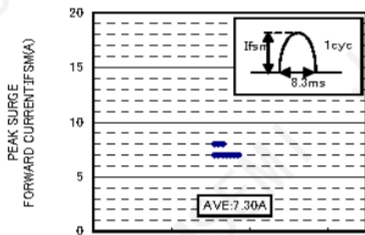
VF DISPERSION MAP



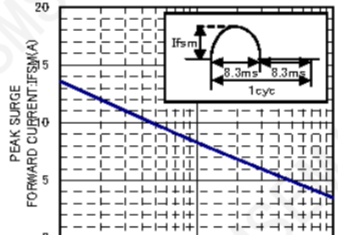
IR DISPERSION MAP



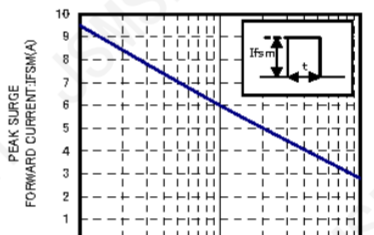
Ct DISPERSION MAP



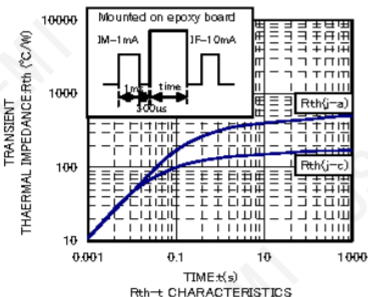
IFSM DISPERSION MAP



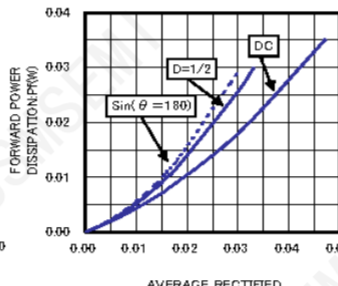
NUMBER OF CYCLES
IFSM-CYCLE CHARACTERISTICS



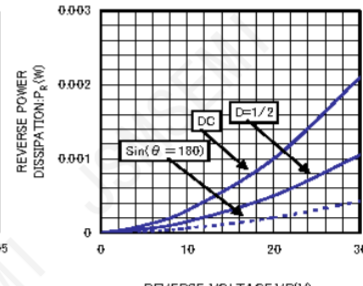
TIME:t(ms)
IFSM-t CHARACTERISTICS



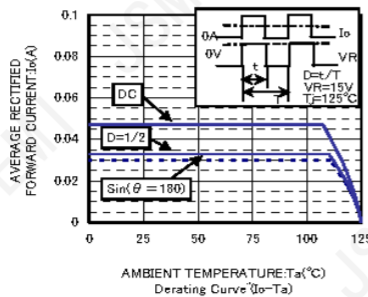
TIME:t(s)
Rth-t CHARACTERISTICS



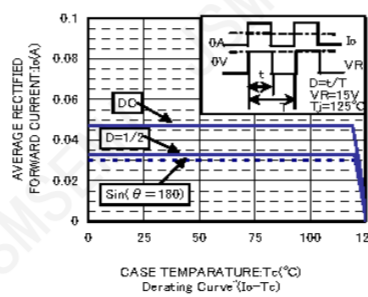
AVERAGE RECTIFIED
FORWARD CURRENT Io(A)
Io-Pf CHARACTERISTICS



REVERSE VOLTAGE:VR(V)
VR-P_r CHARACTERISTICS



AMBIENT TEMPERATURE:Ta(°C)
Derating Curve(Io-Ta)

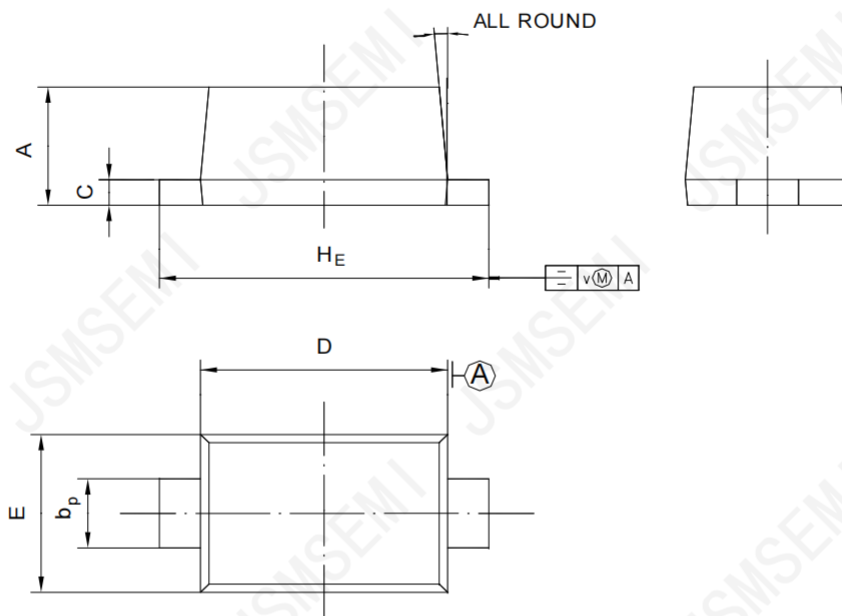


CASE TEMPERATURE:Tc(°C)
Derating Curve(Io-Tc)

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.68 0.58	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°

Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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