

SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

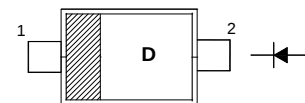
for high speed switching and detection applications

Features

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "D"
Simplified outline SOD-523 and symbol

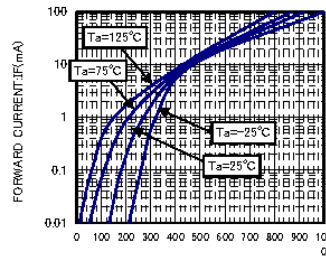
Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

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	$^{\circ}\text{C}$

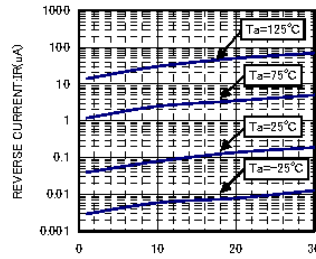
Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

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

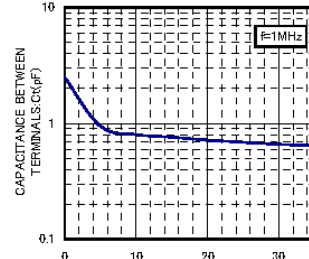
Note: ESD sensitive product handling required.



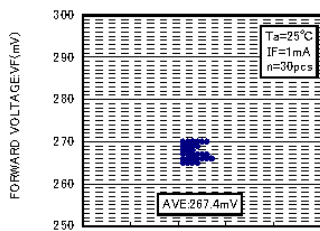
FORWARD VOLTAGE: VF (mV)
VF-IF CHARACTERISTICS
VF 分布



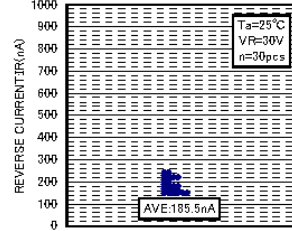
REVERSE VOLTAGE: VR (V)
VR-IR CHARACTERISTICS



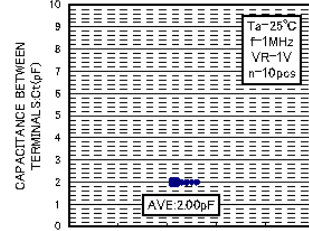
REVERSE VOLTAGE: VR (V)
VR-Ct CHARACTERISTICS



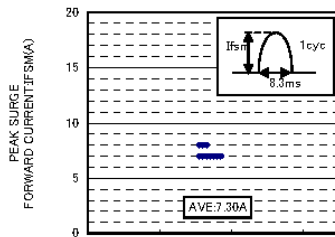
VF DISPERSION MAP



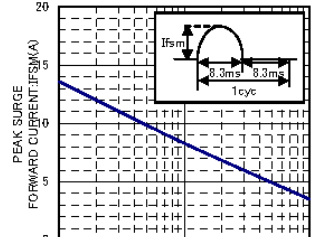
IR DISPERSION MAP



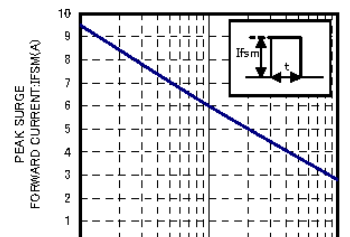
Ct DISPERSION MAP



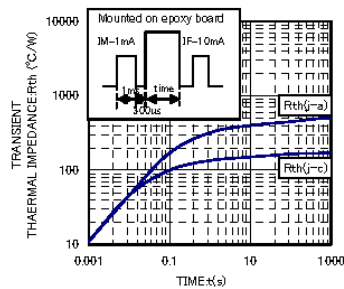
IFSM DISPERSION MAP



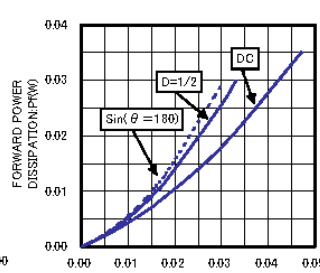
NUMBER OF CYCLES
IFSM-CYCLE CHARACTERISTICS



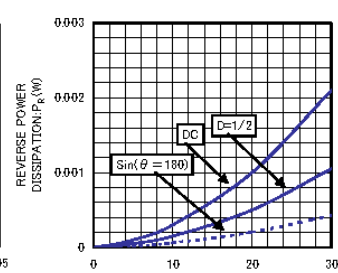
TIME: t (ms)
IFSM-t CHARACTERISTICS



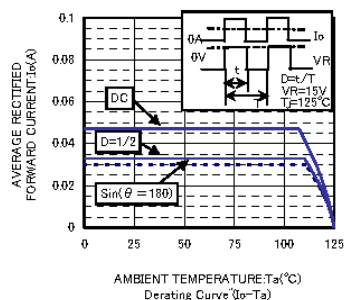
TIME: t (s)
Rth-t CHARACTERISTICS



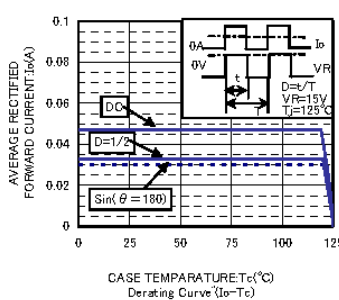
AVERAGE RECTIFIED
FORWARD CURRENT Io (A)
Io-Pf CHARACTERISTICS



REVERSE VOLTAGE: VR (V)
VR-Pk CHARACTERISTICS



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



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