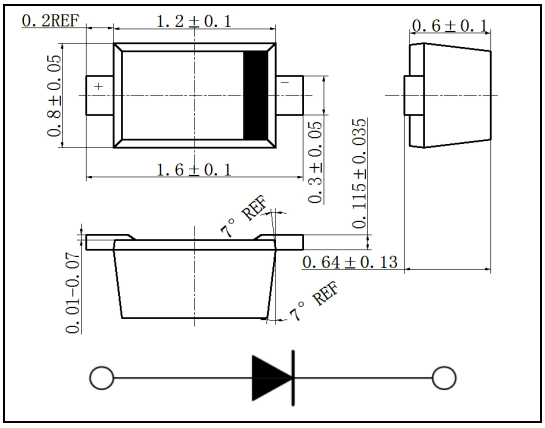
SHENZHEN LONG JING MICRO-ELECTRONICS CO., LTD.

SOD-523 Plastic-Encapsulate Diodes

DB2S16 Silicon epitaxial planar type



Features

- Low forward voltage V_F
- Short reverse recovery time t_{rr}
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

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

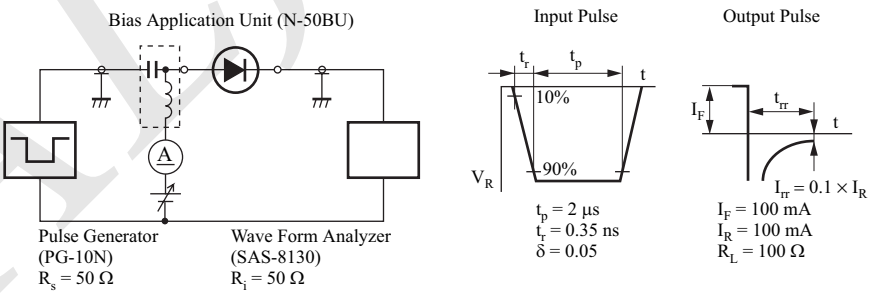
Symbol	Parameter	Value	Unit
V_R	Reverse voltage	30	V
V_{RRM}	Repetitive peak reverse voltage	30	V
$I_{F(AV)}$	Forward current (Average)	100	mA
I_{FM}	Peak forward current	300	mA
I_{FSM}	Non-repetitive peak forward surge current *1	1	A
T_{opr}	Operating ambient temperature	-40~+150	°C/W
T_j	Junction temperature	125	°C
T_{stg}		-65~+150	°C

Note) *1: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

Electrical Characteristics (T_a=25°C unless otherwise specified)

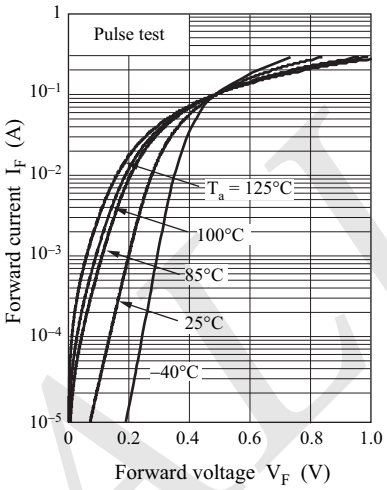
Symbol	Parameter		Test Conditions	Min	Typ	Max	Unit
I_R	Reverse current	V_R = 30V				15	μA
V_F	Forward voltage	I_F = 100mA				0.55	V
C_t	Teminal capacitance	V_R = 10V, f = 1MHz			2		pF
t_{rr}	Reverse recovery time *1	$I_F = I_R$ = 100mA, I_{rr}=0.1×I_R,	R_L = 100Ω		0.8		ns

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3. Absolute frequency of input and output is 250 MHz
*1: t_{rr} measurement circuit

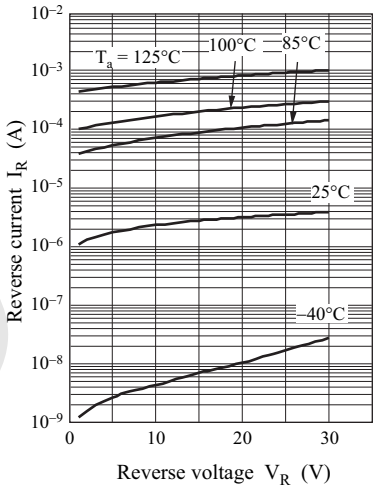


Typical Characteristics

I_F — V_F



I_R — V_R



C_t — V_R