



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-323 Plastic-Encapsulate Diode

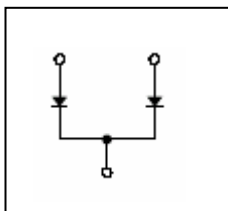
DAN202U

SWITCHING DIODE

FEATURES:

- Four types of packaging are available
- High speed. ($t_{rr}=1.5\text{ns}$ Typ.)
- Suitable for high packing density layout
- High reliability.

SOT-323



MARKING: N

Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	80	V
DC reverse voltage	V_R	80	V
Maximum (peak) forward current	I_{FM}	300	mA
Average forward current	I_O	100	mA
Power dissipation	P_D	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55-150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	80		V
Reverse voltage leakage current	I_R	$V_R=70\text{V}$		0.1	μA
Forward voltage	V_F	$I_F=100\text{mA}$		1.2	V
Diode capacitance	C_D	$V_R=6\text{V}$, $f=1\text{MHz}$		3.5	pF
Reverse recovery time	t_{rr}	$V_R=6\text{V}$, $I_F=5\text{mA}$		4	ns

Typical Characteristics

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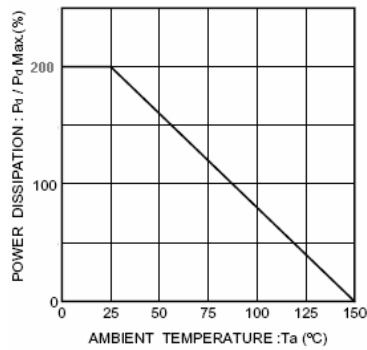


Fig.1 Power attenuation curve

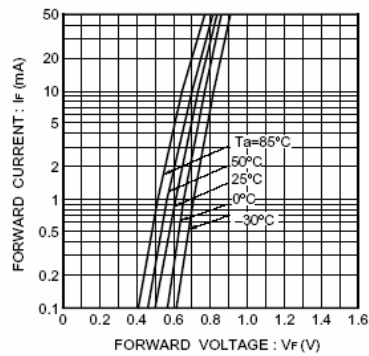


Fig.2 Forward characteristics (P Type)

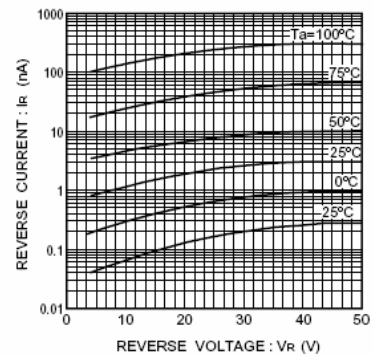


Fig.3 Reverse characteristics (P Type)

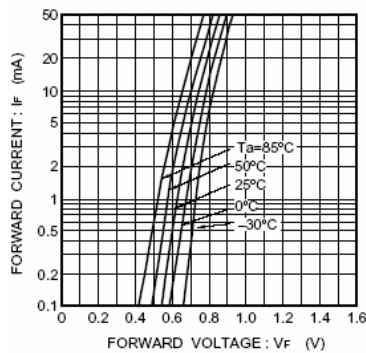


Fig.4 Forward characteristics (N Type)

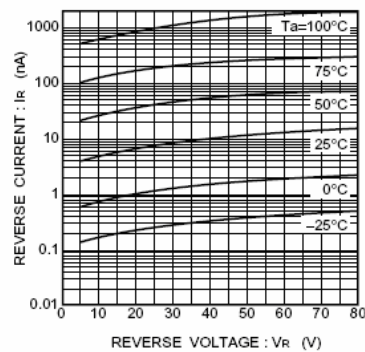


Fig.5 Reverse characteristics (N Type)

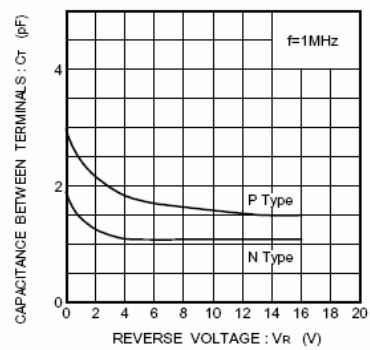


Fig.6 Capacitance between terminals characteristics

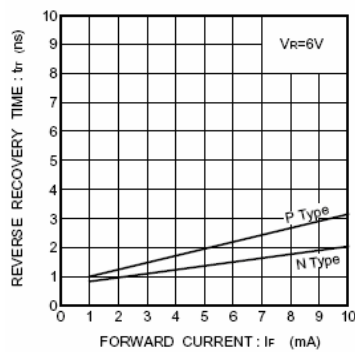


Fig.7 Reverse recovery time

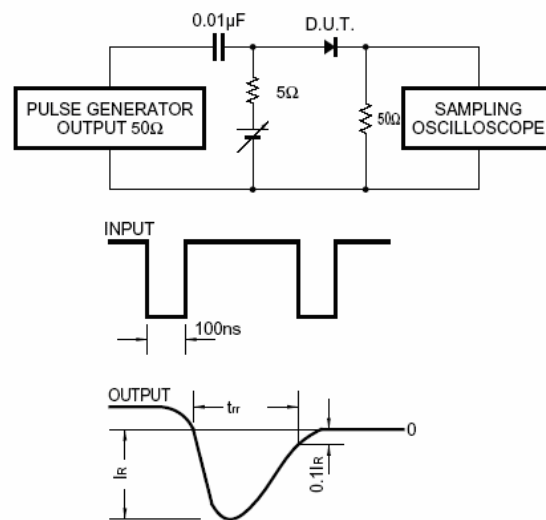


Fig.8 Reverse recovery time (t_{rr}) measurement circuit