DSK Diode Semiconductor Korea *1N4933GL---1N4937GL*

GLASS PASSIVATED JUNCTIONS

VOLTAGE RANGE: 50 --- 600 V
CURRENT: 1.0 A

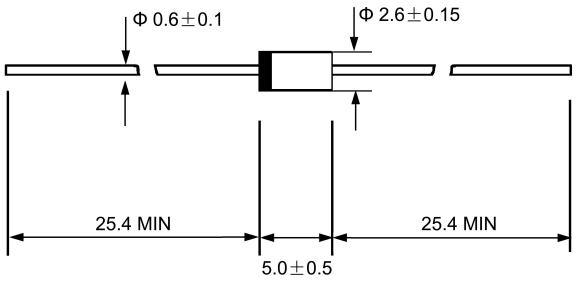
FEATURES

- ◇ Low cost
- ◇ Glass passivated junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Freon,Alcohil,Isopropanop and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- ◇ Case:JEDEC A-405,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.008 ounces,0.23 grams
- ◇ Mounting position: Any

A - 405



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

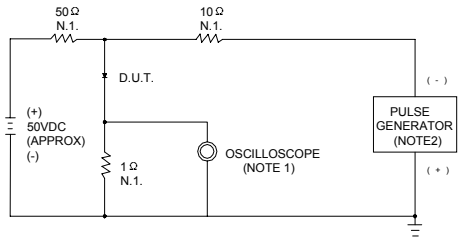
		1N 4933GL	1N 4934GL	1N 4935GL	1N 4936GL	1N 4937GL	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	1.0					A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	30.0					A
Maximum instantaneous forw ard voltage @1.0 A	V_F	1.3					V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	5.0 100.0					μA
Maximym reverse capacitance (Note1)	t_{rr}	200					ns
Typical junction capacitance (Note2)	C_J	12.0					pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	22.0					℃/W
Operating junction temperature range	T_J	- 55---- +175					℃
Storage temperature range	T_{STG}	- 55---- + 175					℃

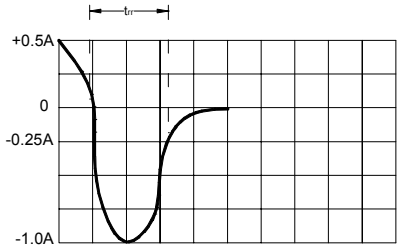
NOTE: 1. Measured with I_F=0.5A I_R=1A I_{rr}=0.25A.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.

FIG.1 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC





NOTES:1.RISE TIME = 7ns MAX. INPUT IMPEDANCE = 1MΩ. 22PF
2.RISE TIME = 10ns MAX. SOURCE IMPEDANCE = 50Ω

SET TIME BASE FOR 50/100 ns /cm

FIG.2 –FORWARD CURRENT DERATING CURVE

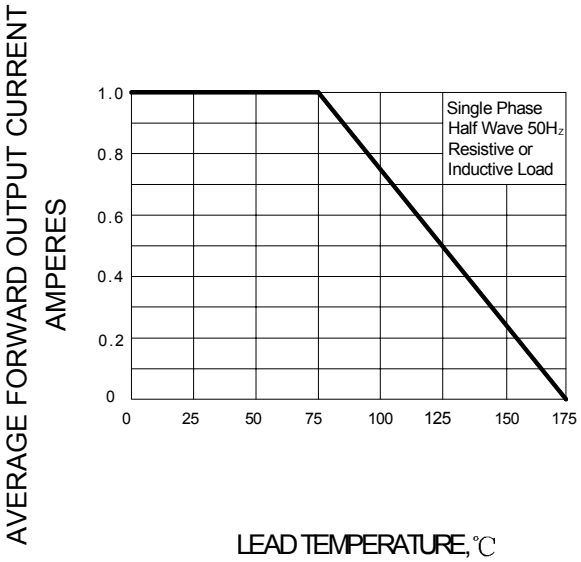


FIG.3 –PEAK FORWARD SURGE CURRENT

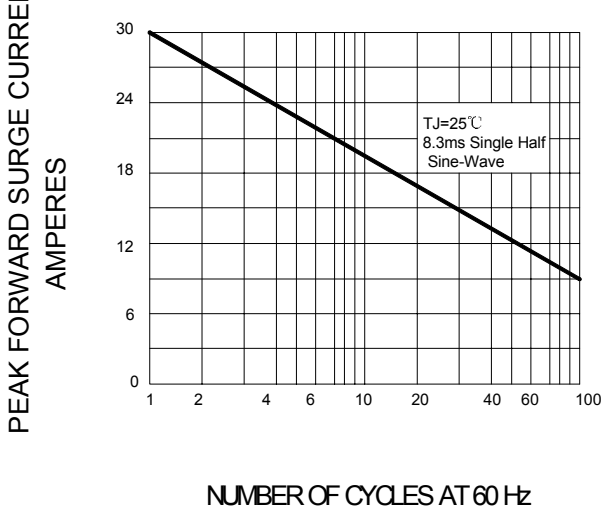


FIG.4–TYPICAL FORWARD CHARACTERISTIC

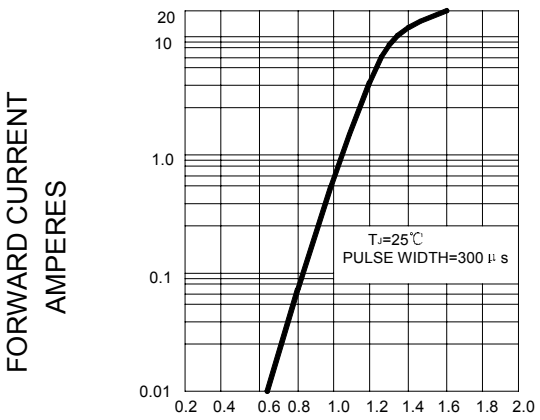


FIG.4–TYPICAL JUNCTION CAPACITANCE