



GLASS PASSIVATED SUPER FAST RECOVERY RECTIFIER

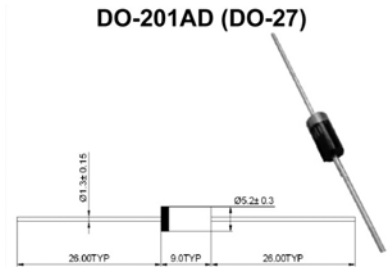
Reverse Voltage 50 to 800 Volts Forward Current 6.0 Amperes

Features

- Glass passivated junction dice
- Low forward voltage drop
- High current capability
- Low reverse leakage
- High surge current capability
- High reliability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

Mechanical Data

- Case: DO-201AD(DO-27) molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014 ounce, 0.39 grams (approximate)



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	SF61	SF62	SF63	SF64	SF65	SF66	SF68	SF69	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	800	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	560	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	600	800	V
Average Rectified Output Current 0.375" (9.5mm) lead length	I_o	6.0								A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	180								A
Maximum instantaneous forward voltage at I_o	V_F	0.95			1.3		1.7	2.2		V
Maximum DC reverse current @ $T_J = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_J = 100^\circ\text{C}$	I_R	5				100				μA
Maximum reverse recovery time (Note 1)	t_{rr}	35								nS
Typical junction capacitance (Note 2)	T_j	100								pF
Operating junction temperature range	J	-55 to +150								$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150								$^\circ\text{C}$

Notes: 1. Reverse Recovery Time test condition: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $IRR=0.25\text{A}$.
2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

■ Characteristics(Typical)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

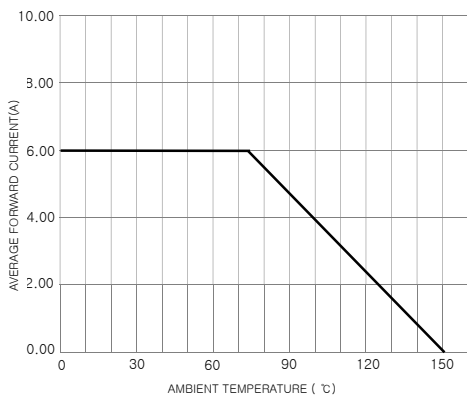


FIG. 2 - TYPICAL FORWARD CHARACTERISTICS

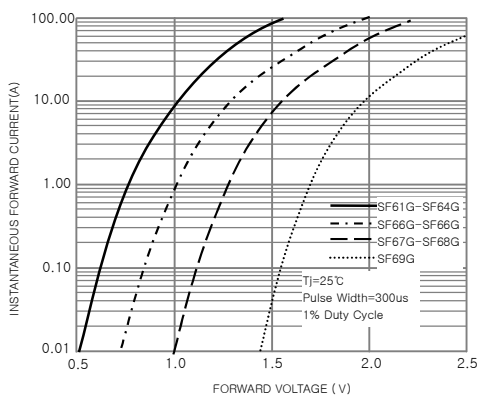


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

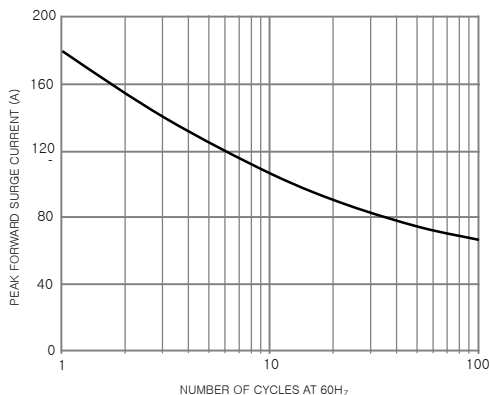


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

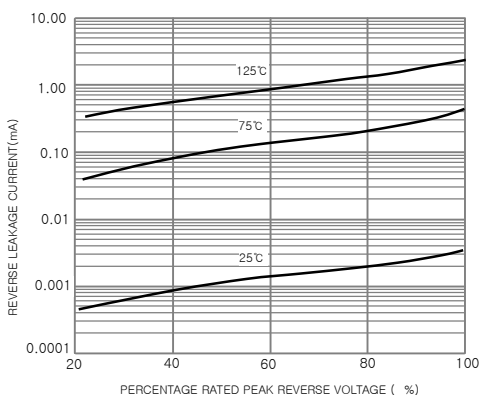


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

