



REVERSE VOLTAGE: 25 V

CURRENT: 0.15 A

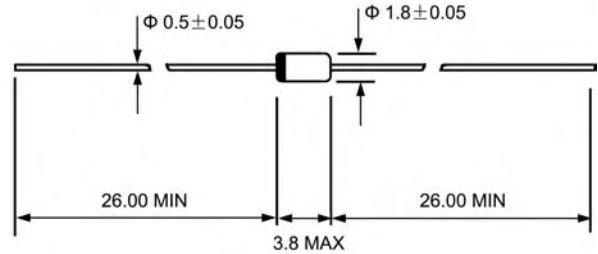
DO-35

Features

- ◇ Silicon epitaxial planar diode
- ◇ High speed switching diode
- ◇ 500 mW power dissipation

Mechanical Data

- ◇ Case: DO-35, glass case
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.004 ounces, 0.13 grams



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

MAXIMUM RATINGS

		1N4154	UNITS
Reverse voltage	V_R	25	V
Peak reverse voltage	V_{RM}	35	V
Average forward rectified current half wave rectification with resistive load $V_R=0V$	$I_{F(AV)}$	150 ¹⁾	mA
Forward surge current @ $t_p=1\mu s$	I_{FSM}	2.0	A
Power dissipation @ $T_A=25^\circ C$	P_{tot}	500 ¹⁾	mW
Junction temperature	T_J	175	°C
Storage temperature range	T_{STG}	-55 --- +175	°C

1)Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS

		MIN	TYP	MAX	UNITS
Forward voltage @ $I_F=30mA$	V_F	-	-	1.0	V
Leakage current @ $V_R=25V$	I_R	-	-	100	nA
	I_R	-	-	100	μA
Capacitance @ $V_R=0V, f=1MHz, V_{HF}=50mV$	C_J	-	-	4.0	pF
Reverse breakdown voltage tested with 5μA pulses	$V_{(BR)R}$	35	-	-	V
Reverse recovery time from $I_F=10mA$ to $I_R=10mA$ to $I_R=1mA$ from $I_F=10mA$ to $I_R=1mA, V_R=6V, R_L=100\Omega$.	t_{rr}	-	-	4	ns
				2	ns
Thermal resistance junction to ambient	$R_{\theta JA}$			500 ¹⁾	K/W
Rectification efficiency @ 100MHz, $V_{RF}=2V$	η_V	0.45	-	-	-

1)Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.



Ratings AND Characteristic Curves

**FIG.1 – ADMISSIBLE POWER DISSIPATION
VERSUS AMBIENT TEMPERATURE**

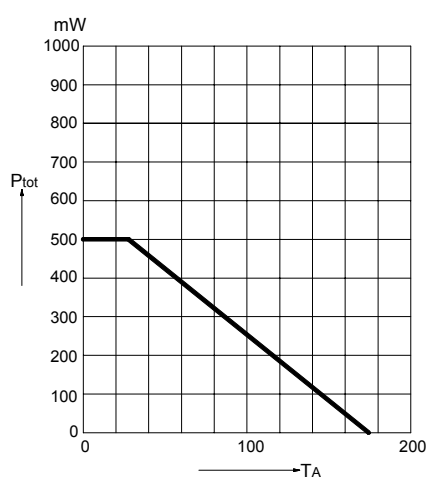


FIG.2 – FORWARD CHARACTERISTICS

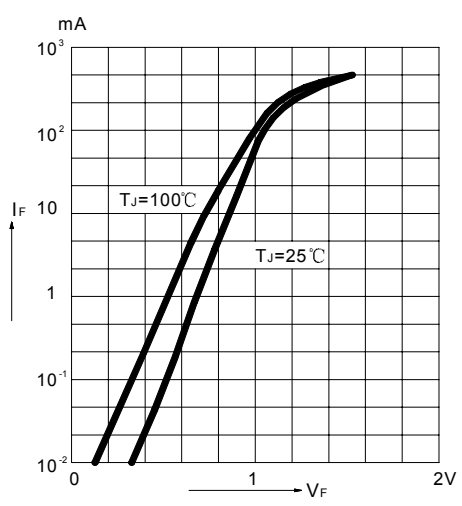
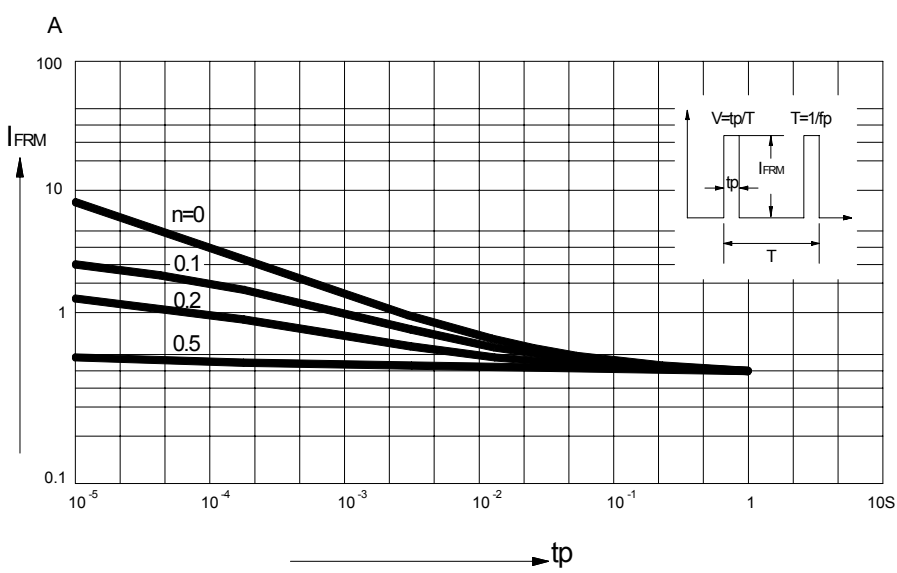


FIG.3 – ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION





Ratings AND Characteristic Curves

FIG.4 – RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

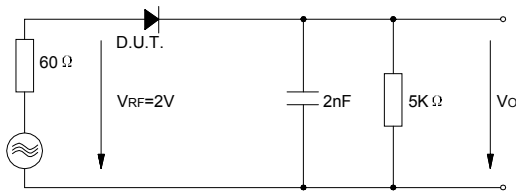


FIG.5 – RELATIVE CAPACITANCE VERSUS VOLTAGE

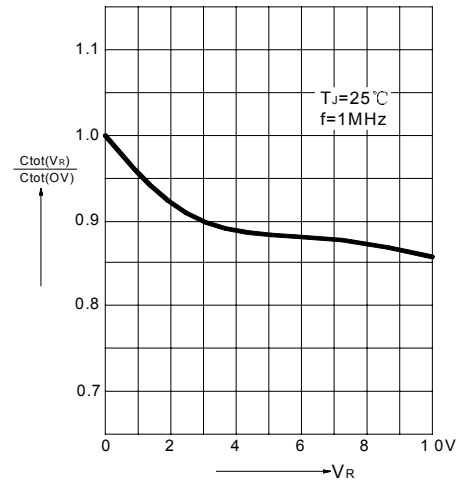


FIG.6 – LEAKAGE CURRENT VERSUS JUNCTION TEMPERATURE

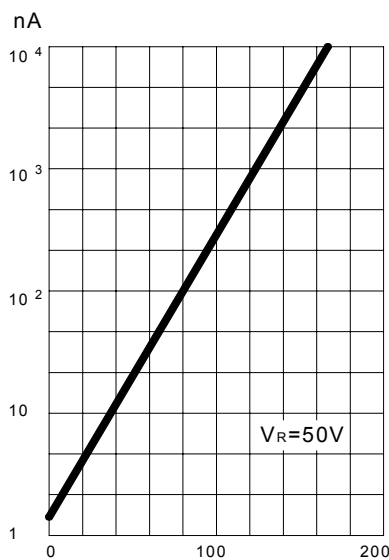
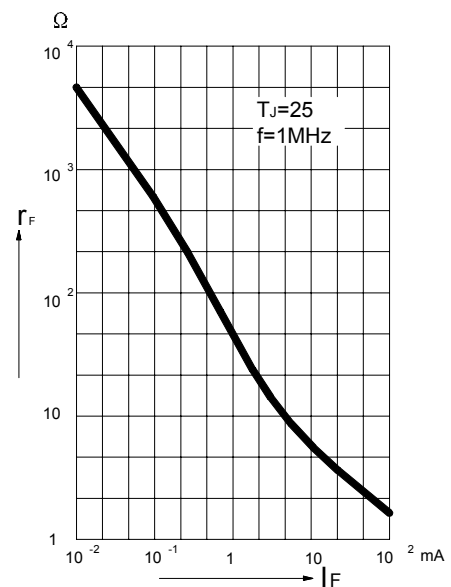


FIG.7 – DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-35	5000/AMMO	100000	41X28.5X38	14.57	13.07