



TAYCHIPST FAST RECOVERY RECTIFIER

ERA34-10

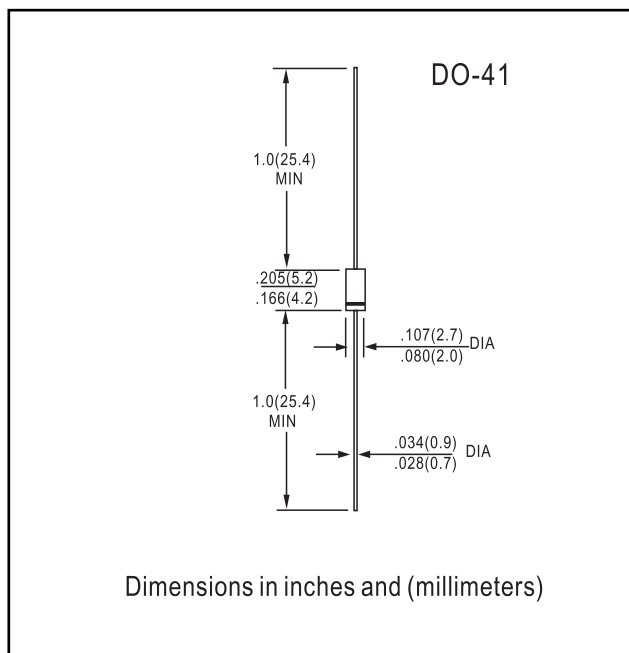
1000V 0.1A

FEATURES

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0

Mechanical Data

Case : DO-41 Molded plastic
 Epoxy : UL94V-O rate flame retardant
 Lead : Axial lead solderable per MIL-STD-202,
 Method 208 guaranteed
 Polarity : Color band denotes cathode end
 Mounting position : Any
 Weight : 0.34 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

		ERA34-10	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC blocking voltage	V_{DC}	1000	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ\text{C}$	$I_{F(AV)}$	0.1	A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ\text{C}$	I_{FSM}	10.0	A
Maximum instantaneous forward voltage @ 0.1 A	V_F	1.0	V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	5.0 100.0	μA
Maximum reverse recovery time (Note1)	t_{rr}	150	ns
Typical junction capacitance (Note2)	C_J	12	pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	55	$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55-----+150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55-----+150	$^\circ\text{C}$

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

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

3. Thermal resistance from junction to ambient.



RATINGS AND CHARACTERISTIC CURVES ERA34-10

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

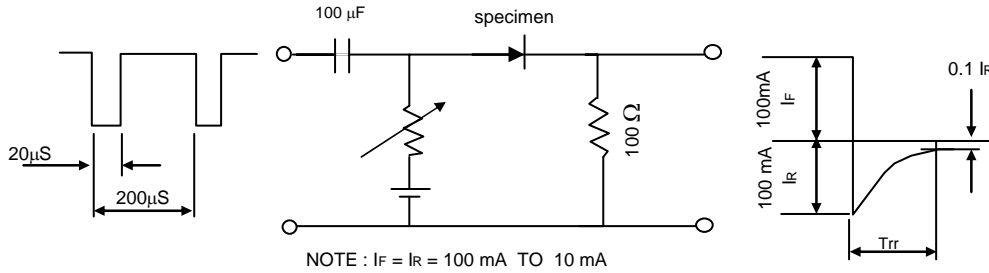


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

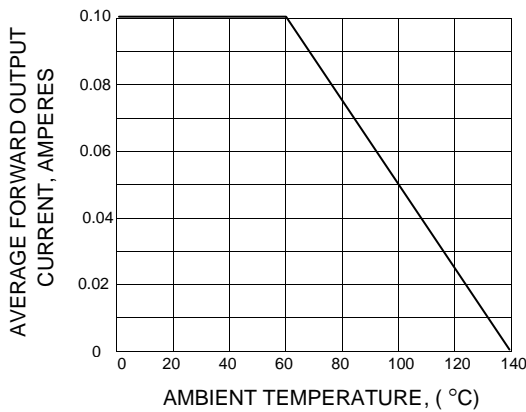


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

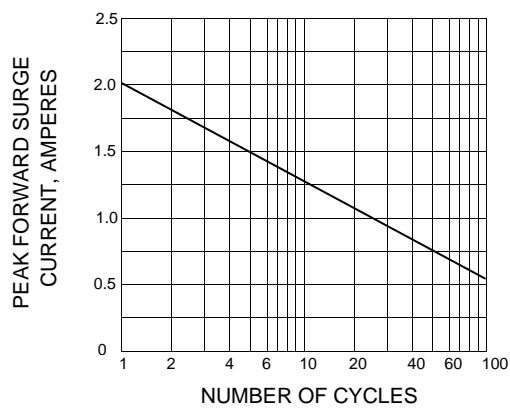


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

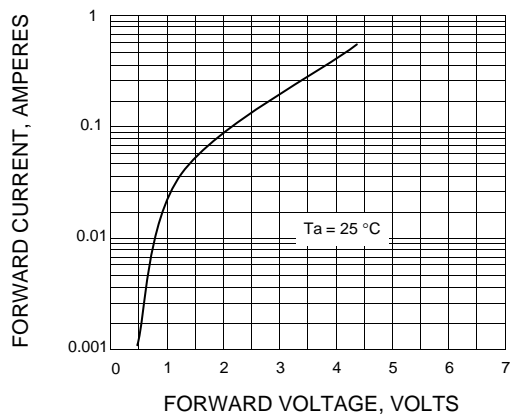


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

