

ER100 ~ ER108

SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 800 Volts **CURRENT** 1.0 Ampere

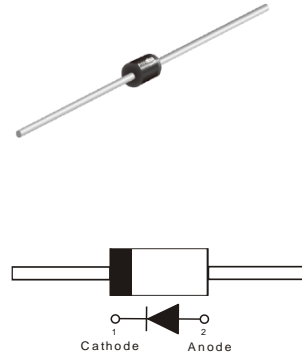
FEATURES

- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Exceeds environmental standards of MIL-S-19500/228.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case : Molded plastic, DO-41
- Terminals : Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity : Color Band denotes cathode end.
- Mounting Position : Any
- Approx. Weight : 0.336 gram

DO-41



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	ER100	ER101	ER101A	ER102	ER103	ER104	ER106	ER108	UNITS
Maximum Recurrent 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
Maximum Average Forward Current .375" (9.5mm) lead length at $T_A=55^\circ\text{C}$	$I_{F(AV)}$	1.0								A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30								A
Maximum Forward Voltage at 1.0A	V_F	0.95		1.25		1.7	2.5			V
Maximum DC Reverse Current $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=100^\circ\text{C}$	I_R	1.0				150				μA
Typical Junction capacitance (Note 2)	C_J	17								pF
Maximum Reverse Recovery Time (Note 1)	t_{rr}	35								ns
Typical Thermal Resistance	$R_{\theta JA}$	50								$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150								$^\circ\text{C}$

NOTES:

1. Reverse Recovery Test Conditions: $I_F=.5A$, $I_R=1A$, $I_{rr}=.25A$
2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC

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RATING AND CHARACTERISTIC CURVES

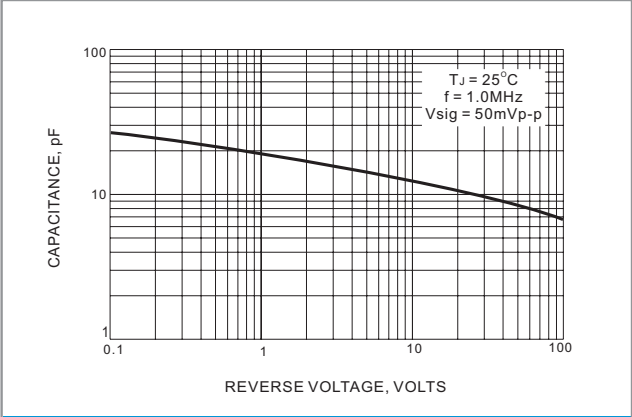


FIG. 1 TYPICAL JUNCTION CAPACITANCE

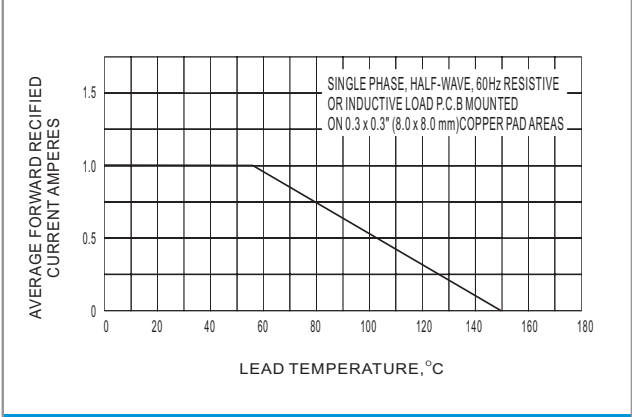


FIG. 2 MAXIMUM AVERAGE FORWARD CURRENT DERATING

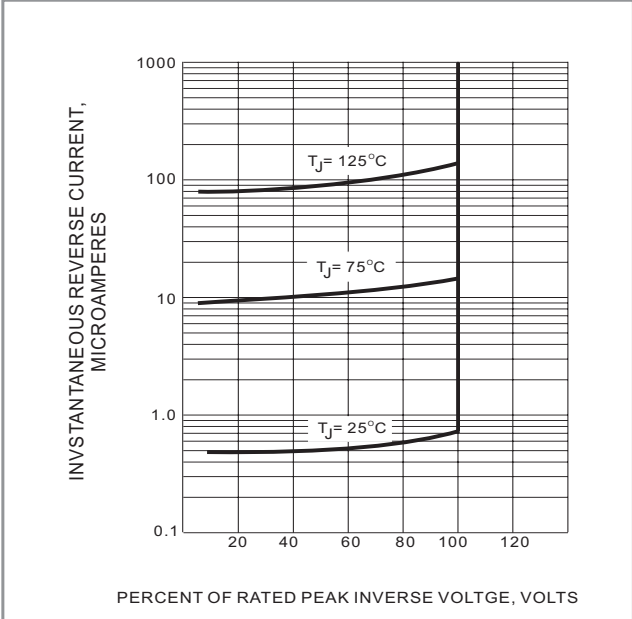


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

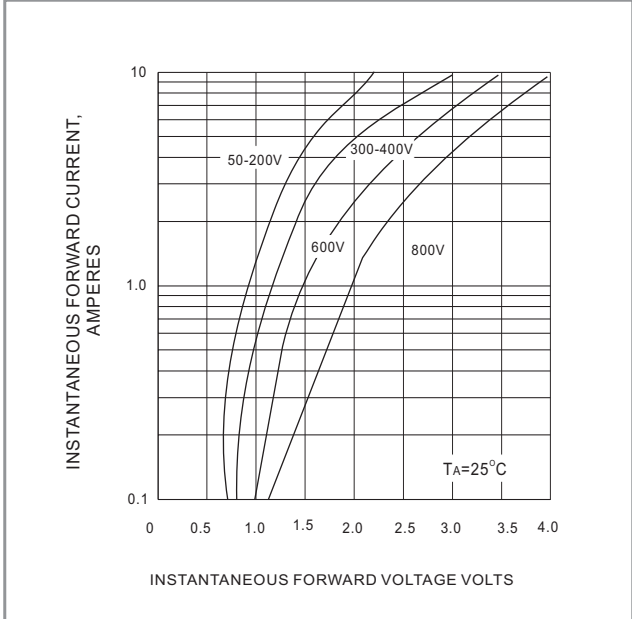


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

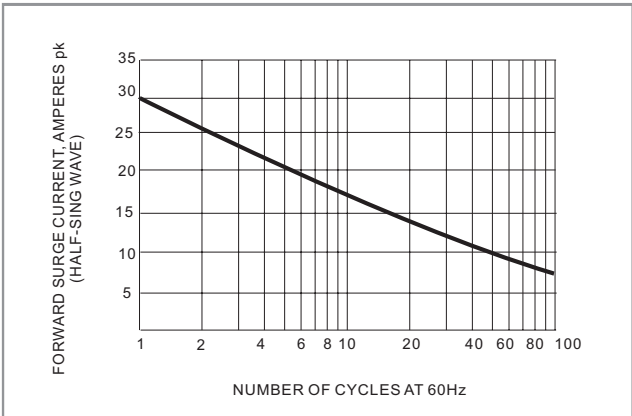


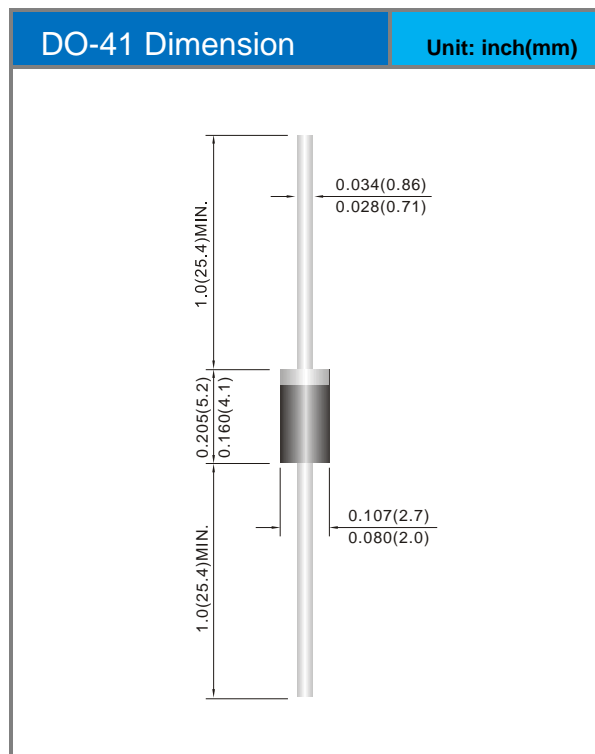
FIG. 5 MAXIMUM NON-REPEITIVE SURGE CURRENT

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
ER100	DO-41	5K pcs / Ammo	ER100
ER101	DO-41	5K pcs / Ammo	ER101
ER101A	DO-41	5K pcs / Ammo	ER101A
ER102	DO-41	5K pcs / Ammo	ER102
ER103	DO-41	5K pcs / Ammo	ER103
ER104	DO-41	5K pcs / Ammo	ER104
ER106	DO-41	5K pcs / Ammo	ER106
ER108	DO-41	5K pcs / Ammo	ER108

Packaging Information



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