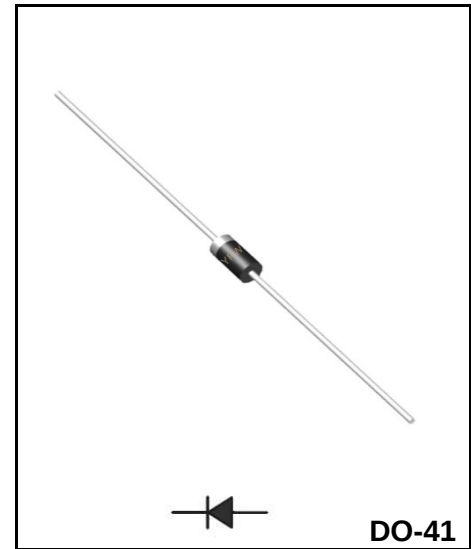


Fast Recovery Silicon Rectifiers
Reverse Voltage - 100 to 1000 V
Forward Current - 1 A
FEATURES

- ◆For surface mounted applications
- ◆Low profile package
- ◆Open Junction chip
- ◆Ideal for automated placement
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: DO-41
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.25g / 0.0088oz


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 current derate by 20 %.

Parameter	Symbols	FR102	FR103	FR104	FR105	FR106	FR107	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T _c = 100 °C	I _{F(AV)}	1.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	30.0						A
Maximum Instantaneous Forward Voltage at 1.0A	V _F	1.28						V
Maximum DC Reverse Current T _a = 25 °C at Rated DC Blocking Voltage T _a =125 °C	I _R	10 500						μA
Maxinum reverse recovery time ^(Note 1)	T _{rr}	150			250	500		nS
Typical Junction Capacitance ^(Note 2)	C _j	21.0						pF
Typical Thermal Resistance	R _{θJA}	65						°C/W
Operating and Storage Temperature Range	T _j , T _{stg}	-55 ~ +150						°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

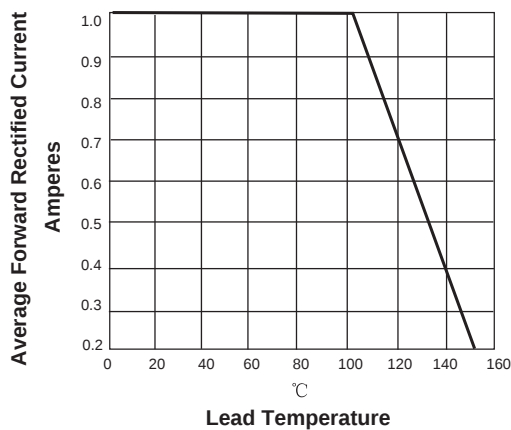


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

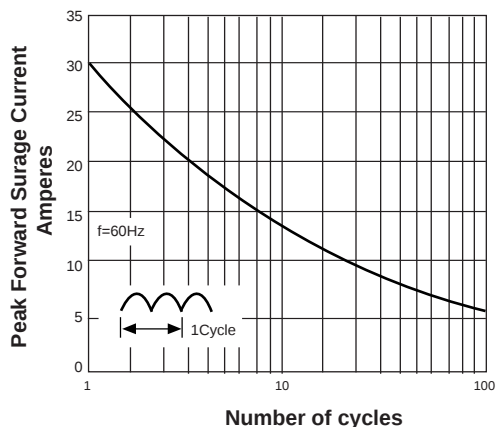


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

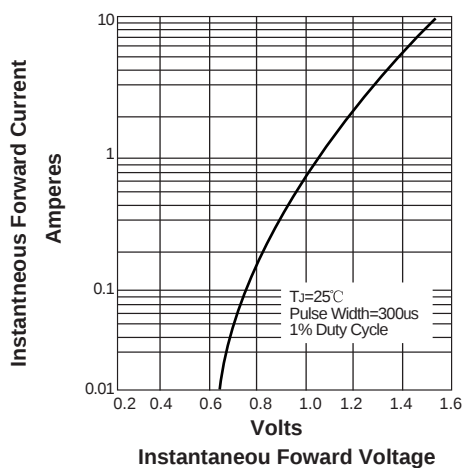
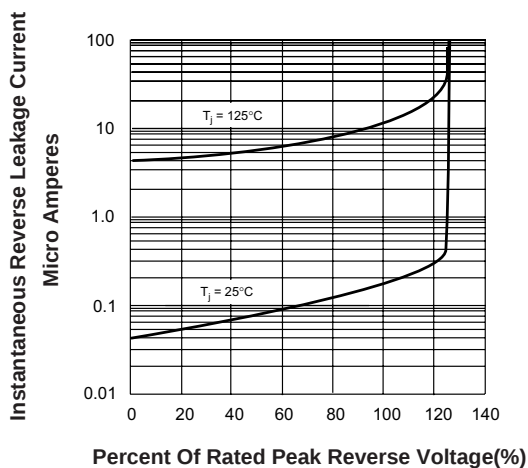


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



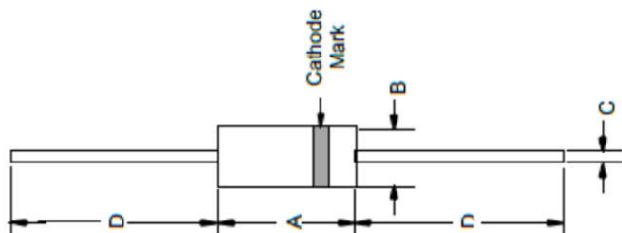
Ordering information

Package	Packing Description	Packing Quantity
DO-41	bulk	1000PCS/Box 25000PCS/Carton
	braid	5000PCS/Box 50000PCS/Carton

Package Dimensions

DO-41

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	4.10	5.20	0.166	0.205
B	2.00	2.70	0.080	0.107
C	0.60	0.70	0.024	0.028
D	25.4	-	1.00	-



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