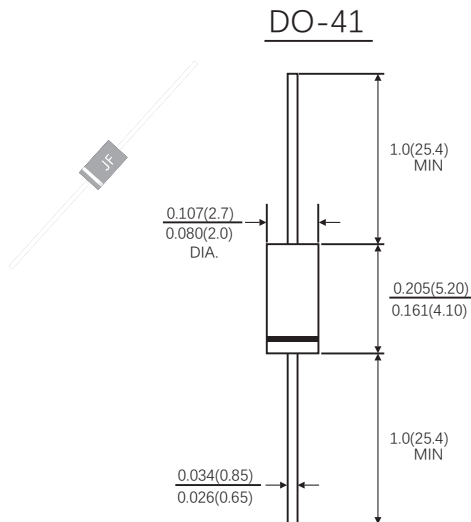


FEATURE

- Low leakage
- Low forward voltage drop
- High current capability
- High current surge
- High reliability
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

MECHANICAL DATA

- Case: JEDEC DO-41 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.012ounce, 0.33 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified.Single phase ,half wave ,60H ,resistive or inductive load. For capacitive load,derate current by 20%.)

Parameters	Symbol	FR101	FR102	FR103	FR104	FR105	FR106	FR107	Unit
Maximum Recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	I_{FAV}	1.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0A(Note 3)	V_F	1.3							Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_J=25^{\circ}C$	I_R							μA
	$T_J=125^{\circ}C$								
Maximum reverse recovery time(Note1)	T_{rr}	150				250	500		ns
Typical junction capacitance(Note2)	C_j	10							pF
Operating junction and storage temperature range	T_J/T_{STG}	-55 to+150							°C

Note: 1.Test conditions: $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$.
2.Measured at 1MHZ and applied reverse voltage of 4.0 Volts D.C.
3.Short duration pulse test used to minimize self-heating effect

RATINGS AND CHARACTERISTIC CURVES OF FR101 THRU FR107

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

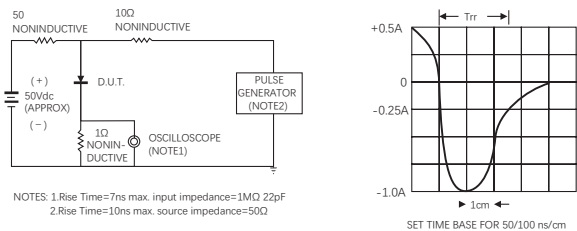


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

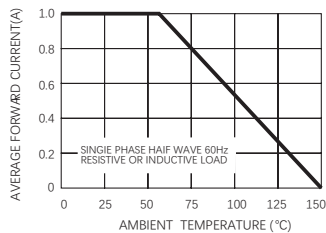


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

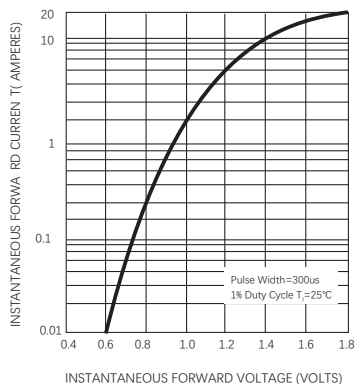


FIG.4-TYPICAL REVERSE CHARACTERISTICS

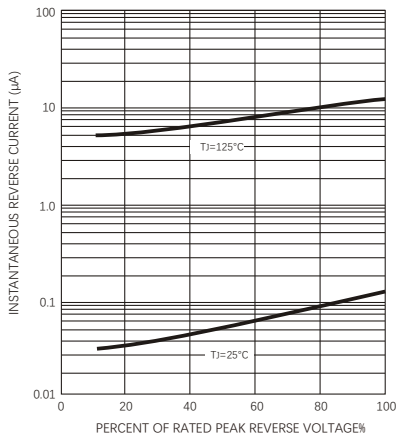


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

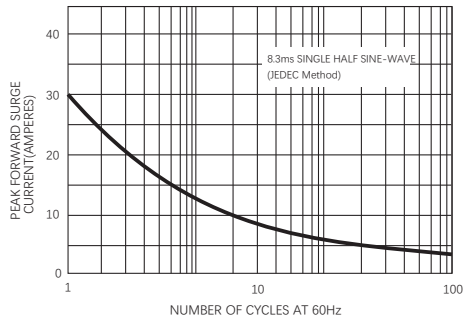
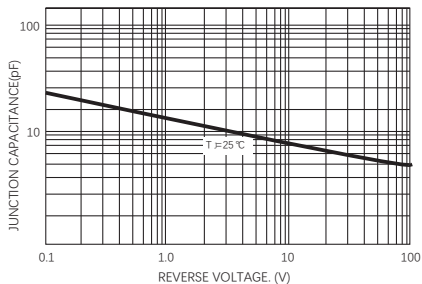


FIG.6-TYPICAL JUNCTION CAPACITANCE



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