

MUR120 - MUR140

PRV : 200 - 400 Volts
I_o : 1.0 Ampere

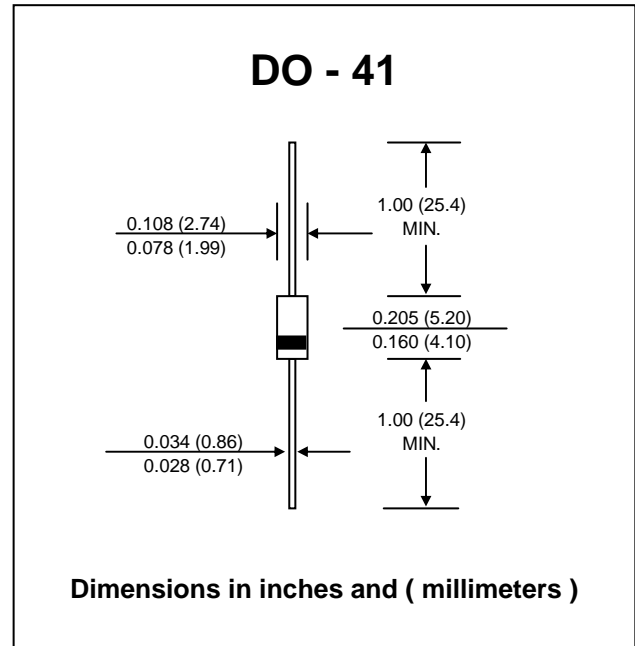
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

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 : 0.339 gram

ULTRAFAST RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	MUR120	MUR140	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	200	400	V
Maximum Working Reverse Voltage	VRWM	200	400	V
Maximum DC Blocking Voltage	VDC	200	400	V
Maximum Average Forward Current , See Fig. 2	I _{F(AV)}	1.0		A
Non-repetitive Peak Forward Surge Current	I _{FSM}	35		A
Maximum Forward Voltage at I _F = 1 Amp. (Note 1)	V _F	0.875	1.25	V
Maximum Reverse Current at T _J = 25 °C	I _R	2.0	5.0	μA
Rated DC Blocking Voltage T _J = 125 °C	I _{R(H)}	50	150	μA
Maximum Reverse Recovery Time (Note 2)	T _{rr}	25	50	ns
Junction Temperature Range	T _J	- 65 to + 175		°C
Storage Temperature Range	T _{STG}	- 65 to + 175		°C

Notes :

- (1) Pulse Test : Pulse Width = 300 μs, Duty Cycle ≤ 2.0%
- (2) Reverse Recovery Test Conditions : I_F = 0.5A, I_R = 1A ; I_{rr} = 0.25 A

RATING AND CHARACTERISTIC CURVES (MUR120 - MUR140)

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

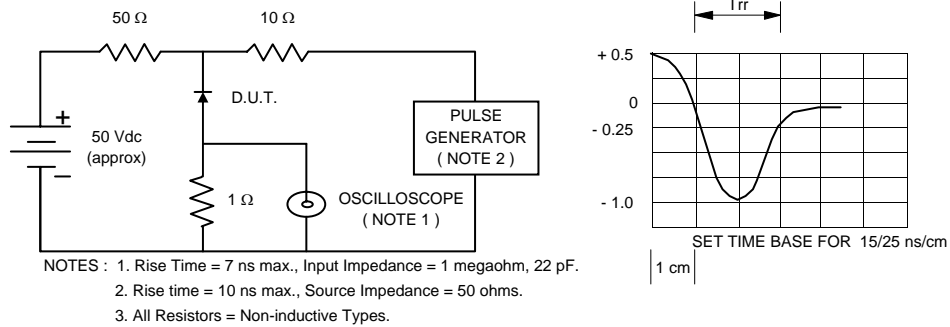


FIG. 2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

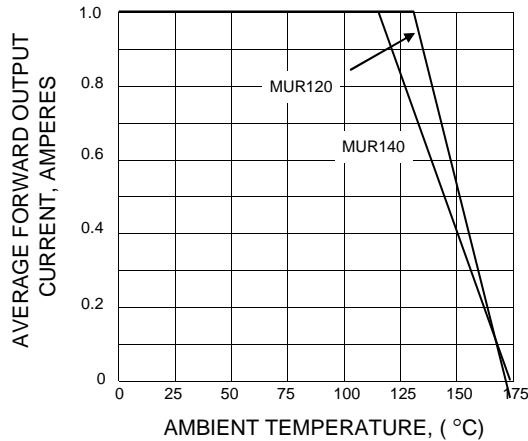


FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

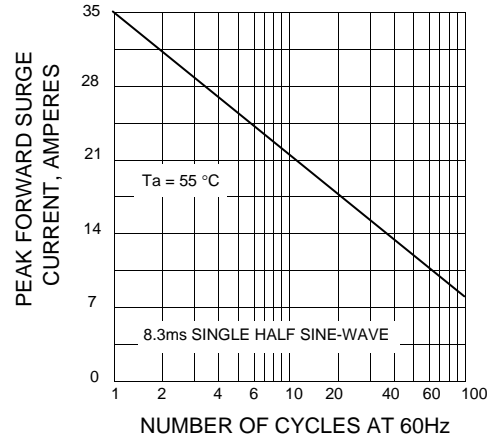


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

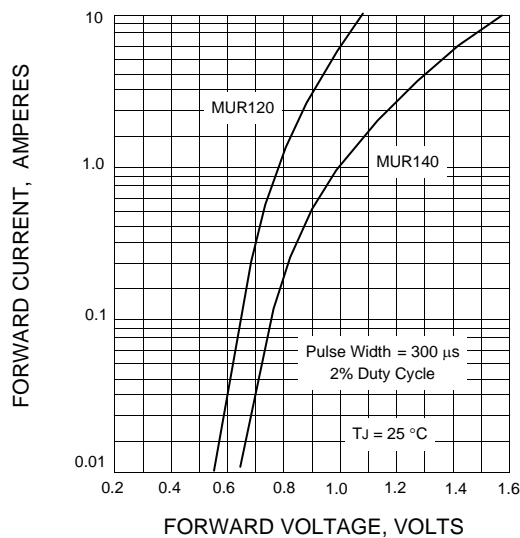


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

