MUR105 THRU MUR1100

DO-41

FEATURES

- Ultra fast switching for high efficiency
- Low leakage current
- High forward surge capability
- Solder dip 260 °C, 40 s
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

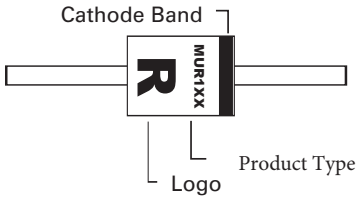
PRIMARY CHARACTERISTICS

IF(AV)	1.0 A
VRRM	50 V to 1000 V
IFSM	35 A
Trr	45nS , 60nS, 75nS
VF	970.V, 1.35V, ,170V
IR	5.0 μA
TJ max.	150 °C

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:0.40 grams

Part Marking System



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	MUR105	MUR110	MUR115	MUR120	MUR140	MUR160	MUR180	MUR1100	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	105	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	150	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375"(9.5mm) lead length at TA=50℃	$I_{(AV)}$	1.0								Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35								Amps
Maximum instantaneous forward voltage at 1.0A	V_F	0.97			1.35			1.70		Volts
Maximum DC reverse current TA=25 ℃ at rated DC blocking voltage TA=100 ℃	I_R	5.0 50								μ A
Maximum Reverse Recovery Time	T_{RR}	45				60		75		nS
Typical junction capacitance (NOTE 1)	C_J	30.0								pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	20.0								℃/W
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175								℃

Ratings and Characteristic Curves (T_A=25°C unless otherwise noted)

FIG. 1- FORWARD CURRENT DERATING CURVE

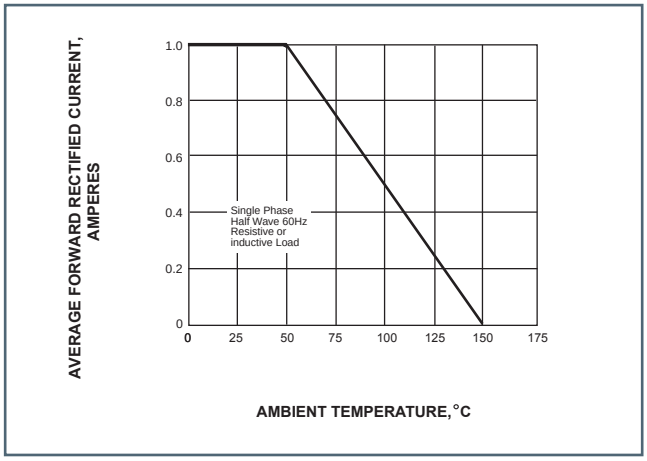


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

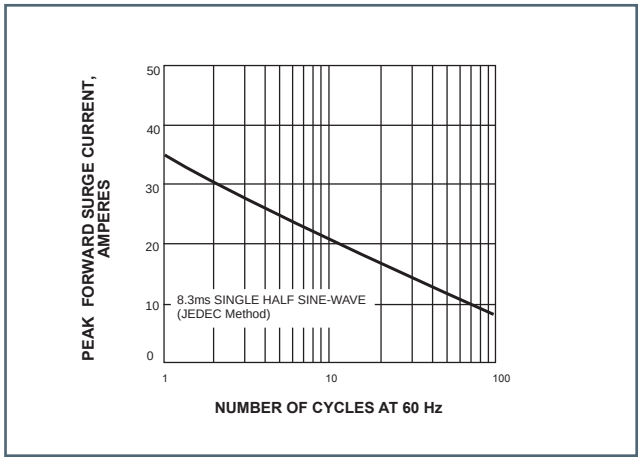


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

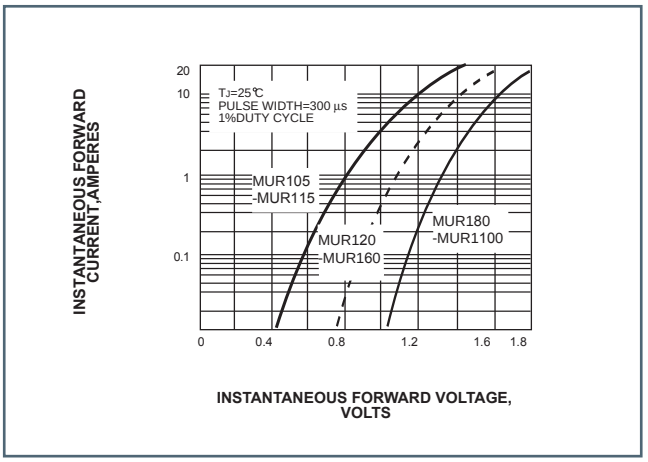
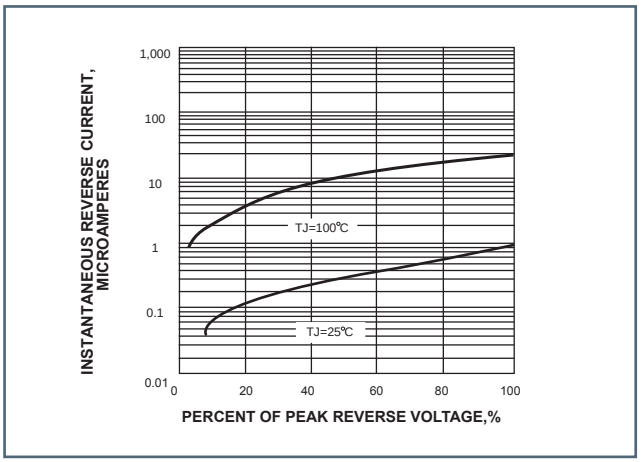
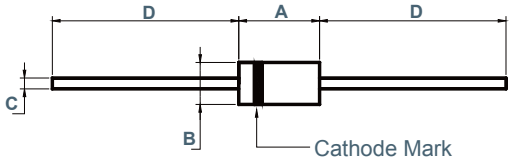


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Dimensions

DO-41



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.166	0.205	4.10	5.20	
B	0.080	0.107	2.00	2.70	Φ
C	0.028	0.034	0.70	0.90	Φ
D	1.000	——	25.4	——	