

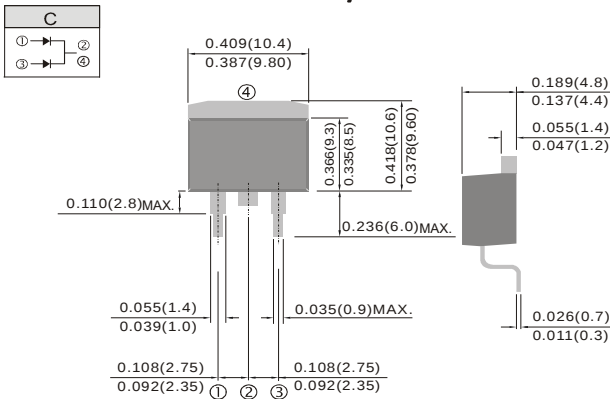


WANGFENG ELECTRON

旺峰电子

MURS3020 THRU MURS30100

20.0AMP SURFACE MOUNT SUPER FAST RECTIFIERS

FEATURES * Low forward voltage drop * High current capability * High reliability * High surge current capability * Epitaxial construction MECHANICAL DATA * Case: Molded plastic * Epoxy: UL 94V-0 rate flame retardant * Lead: Lead solderable per MIL-STD-202, method 208 guranteed * Polarity: As Marked * Mounting position: Any * Weight: 2.24 grams	VOLTAGE RANGE 200 to 600 Volts CURRENT 30.0 Ampere TO-263 / D²PAK  Dimensions in inches and (millimeters)
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MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	MURS3020	MURS3040	MURS3060	MURS3080	MURS30100	UNITS
Maximum Recurrent Peak Reverse Voltage	200	400	600	800	1000	V
Maximum RMS Voltage	140	280	420	560	700	V
Maximum DC Blocking Voltage	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T _L =100°C	30					A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	250					A
Maximum Instantaneous Forward Voltage at 30.0A	1.0	1.25	1.7	2.1		V
Maximum DC Reverse Current Ta=25°C	5.0					μA
at Rated DC Blocking Voltage Ta=100°C	150					μA
Maximum Reverse Recovery Time (Note 1)	35					nS
Typical Junction Capacitance (Note 2)	140					pF
Operating and Storage Temperature Range T _J , T _{stg}	-65 — +150					°C

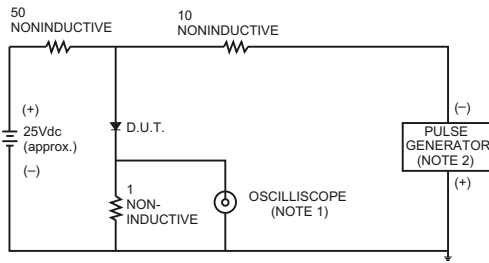
NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATING AND CHARACTERISTIC CURVES (MURS3020 THRU MURS30100)

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



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.



FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

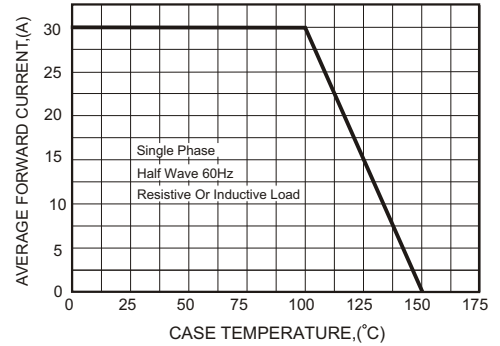


FIG.3-TYPICAL FORWARD CHARACTERISTICS

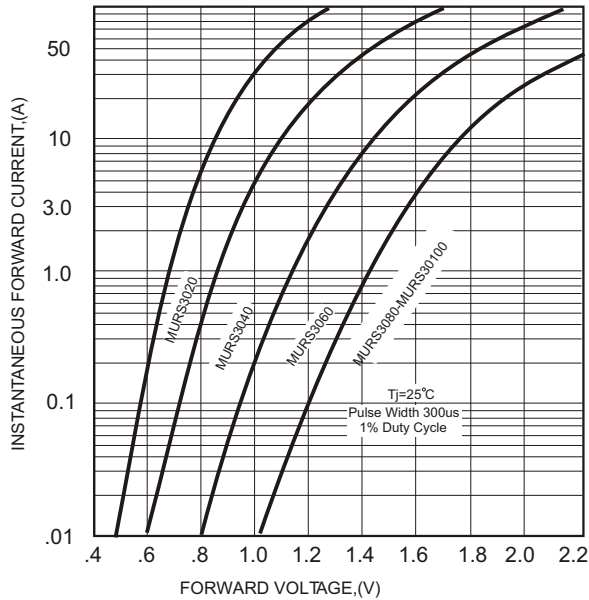


FIG.4-TYPICAL REVERSE CHARACTERISTICS

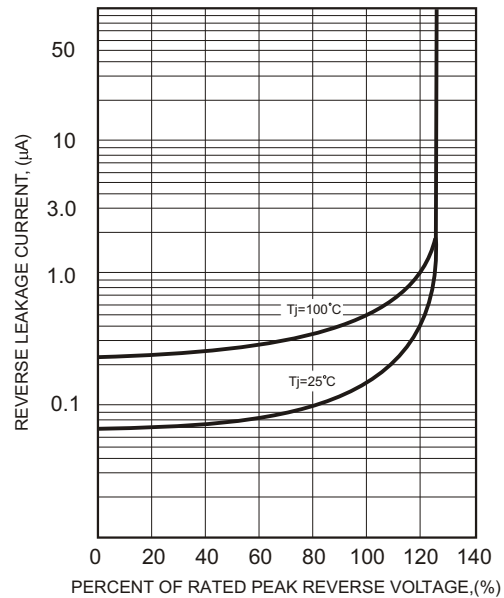


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

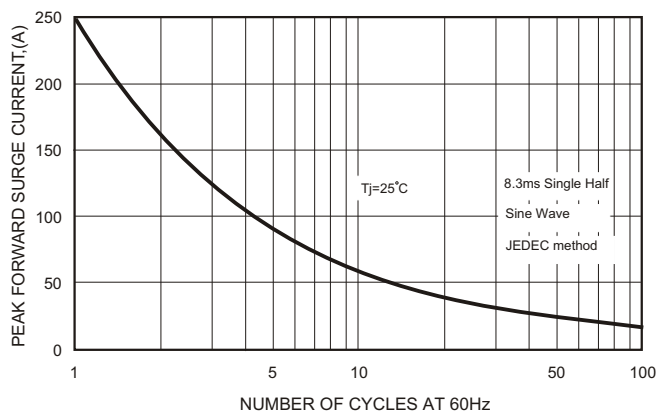


FIG.6-TYPICAL JUNCTION CAPACITANCE

