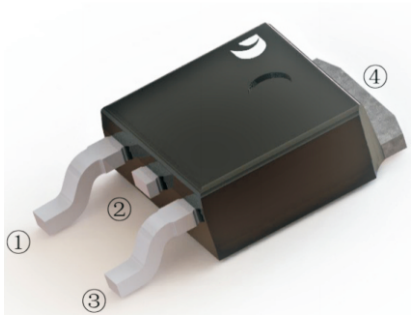
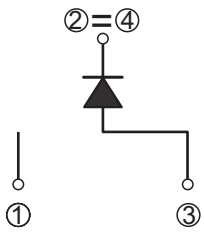
Fast Recovery Epi Diodes
Reverse Voltage – 600 Volts
Forward Current – 5.0 Amperes

TO-252W(D-PAK)

RoHS COMPLIANT





FEATURES
- High frequency operation
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25℃ ambient temperature unless otherwise specified

CHARACTERISTICS	SYMBOL	MUR560DS	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	60	A
Max Instantaneous Forward Voltage at 5 A DC	V_F	1.60	V
Maximum DC Reverse Current T_a = 25°C at Rated DC Reverse Voltage T_a =125°C	I_R	10 100	uA
Typical Junction Capacitance f=1MHz,4V DC	C_j	45	pF
Typical Thermal Resistance (1)	$R_{\theta JA}$	50	°C/W
Maximum Reverse Recovery Time (2)	t_{rr}	35	ns
Operating Junction Temperature Range	T_j	-55 ~ +150	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

(1) P.C.B. mounted with 10cm x 10cm x 1mm copper pad areas.
(2) Measured with I_F 0.5 A, I_R = 1 A, I_{rr} = 0.25 A.

Fig.1 Maximum Average Forward Current Rating

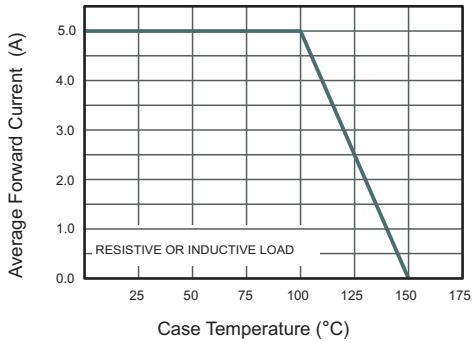


Fig.2 Typical Reverse Characteristics

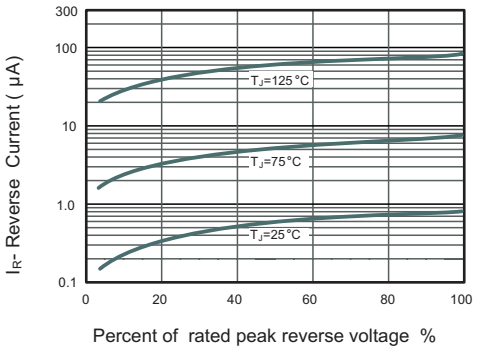


Fig.3 Typical Forward Characteristics

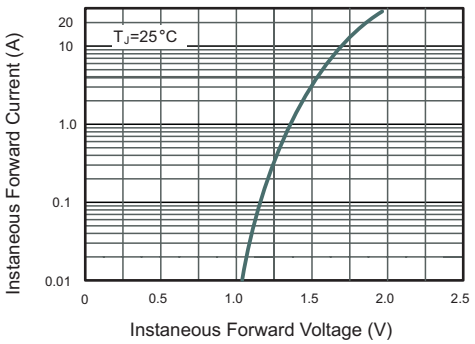


Fig.4 Typical Junction Capacitance

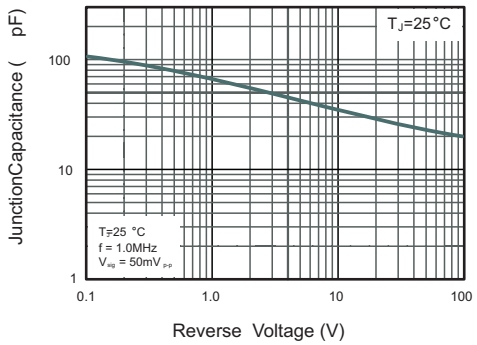


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

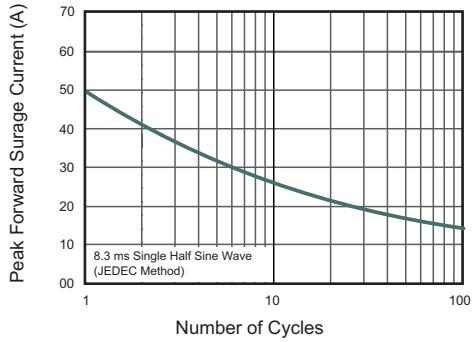
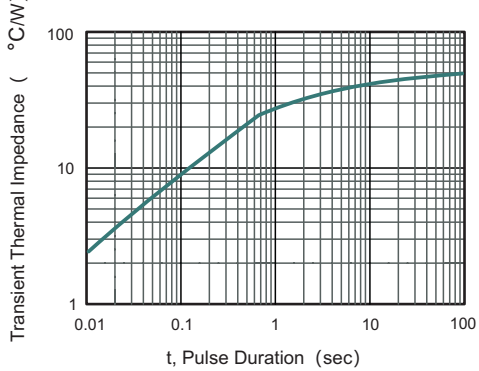
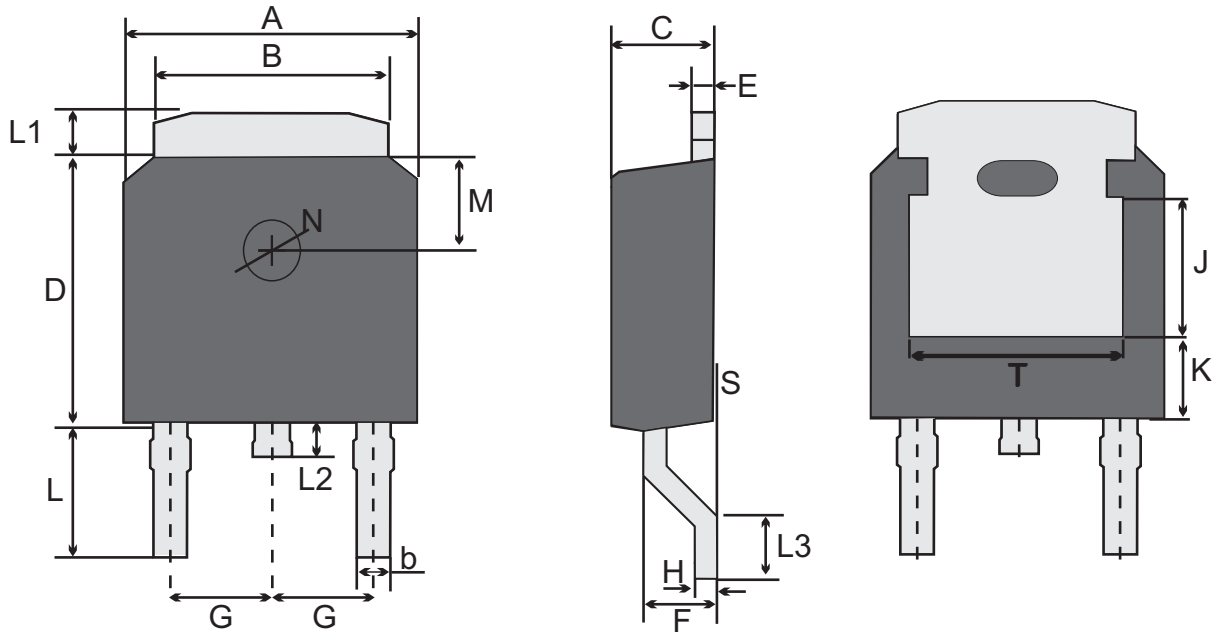


Fig.6- Typical Transient Thermal Impedance



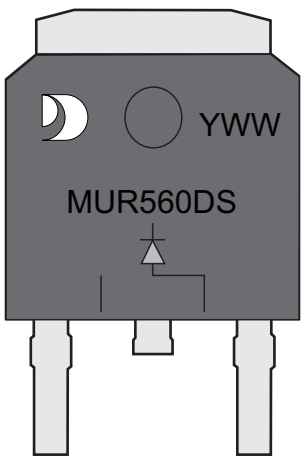
TO-252W(D-PAK) Package Outline Dimensions



TO-252W(D-PAK) mechanical data

UNIT		A	B	b	C	D	E	F	G	H	L	L1	L2	L3	S	M	N	J	K	T
mm	max	6.7	5.5	0.8	2.5	6.3	0.6	1.8	2.29 TYPICAL	0.55	3.1	1.2	1.0	1.75	0.23	1.8 TYPICAL	1.3 TYPICAL	3.16 ref.	1.80 ref.	4.83 ref.
	typ	6.6	5.3	0.7	2.3	6.1	0.5	1.5		0.50	2.8	1.0	0.8	1.30	0.15					
	min	6.3	5.1	0.3	2.1	5.9	0.4	1.3		0.45	2.7	0.8	0.6	1.00	0.0					
mil	max	264	217	31	98	248	24	71	90 TYPICAL	22	122	47	39	69	9	71 TYPICAL	51 TYPICAL	124 ref.	71 ref.	190 ref.
	typ	260	209	28	90	240	20	59		20	110	39	31	51	6					
	min	248	201	12	83	232	16	51		18	106	31	24	55	0					

MARKING DIAGRAM



YWW: Date Code
Y:Years(0~9)
WW:Week
MUR560DS: Product name
(NOTE: The weekly code is based on the actual number of weeks in the calendar year.)

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