

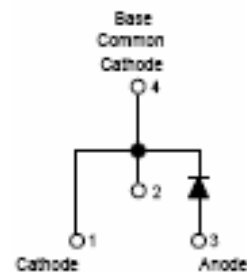
MURD1560 ULTRAFAST PLASTIC RECTIFIER

Applications:

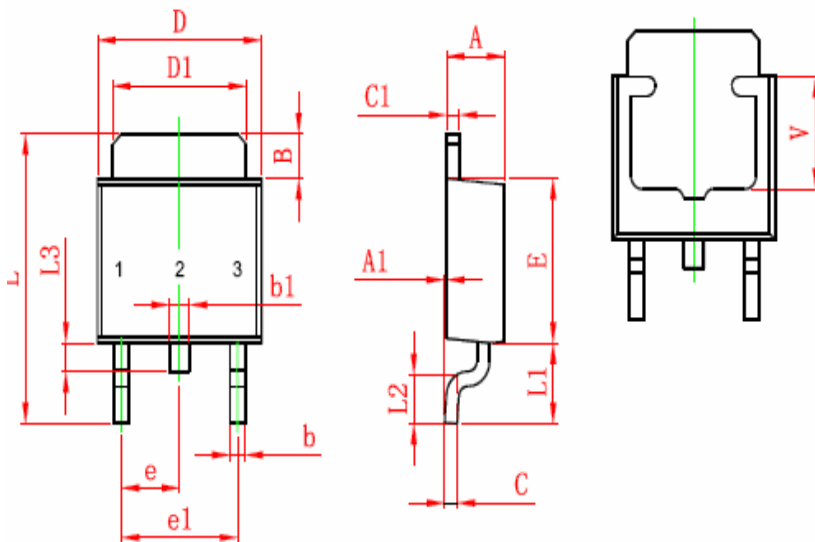
- Switching Power Supply
- Power Switching Circuits
- General Purpose

Features:

- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

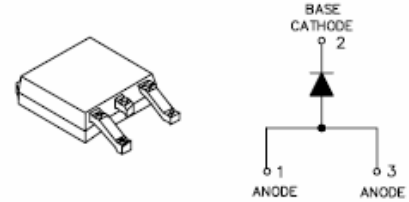
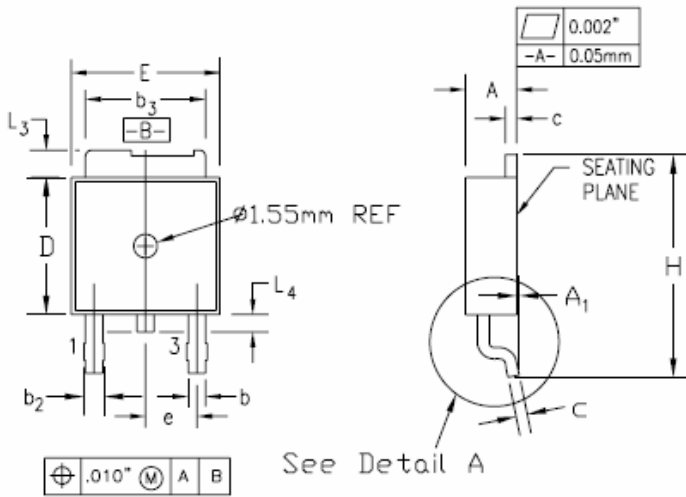


Mechanical Dimensions (In mm):

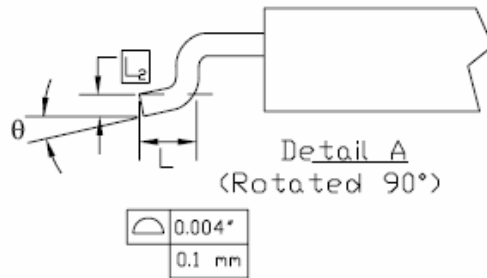
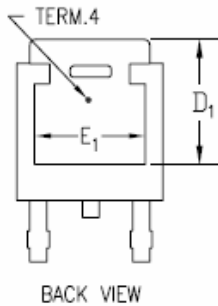


Symbol	Dimensions In Millimeters	
	Min.	Max.
A	2.200	2.400
A1	0.000	0.127
B	1.350	1.650
b	0.500	0.700
b1	0.700	0.900
c	0.430	0.580
c1	0.430	0.580
D	6.350	6.650
D1	5.200	5.400
E	5.400	5.700
e	2.300 TYP.	
e1	4.500	4.700
L	9.500	9.900
L1	2.550	2.900
L2	1.400	1.780
L3	0.600	0.900
V	3.800 REF.	

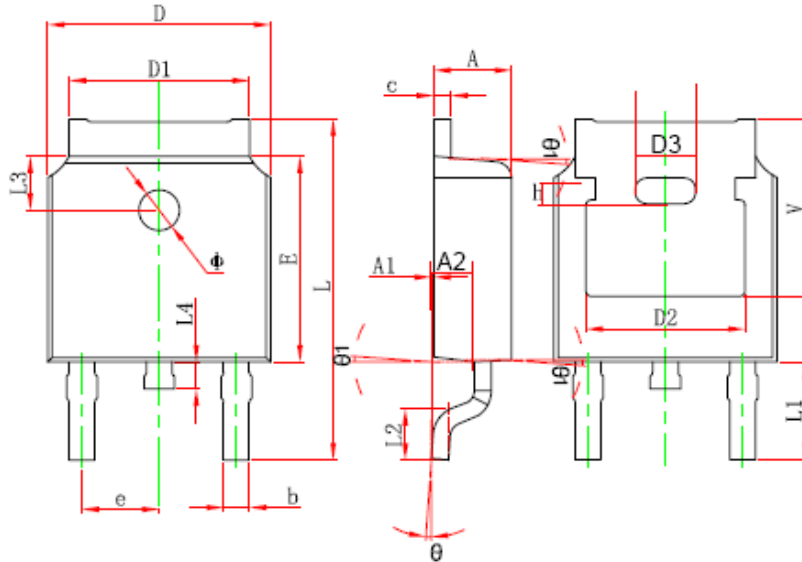
OPTION 1



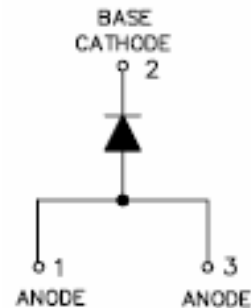
SYMBOL	INCHES		MILLIMETERS	
	MIN.	MAX.	MIN.	MAX.
A	0.086	0.094	2.19	2.38
A ₁	—	0.005	—	0.13
b	0.025	0.035	0.64	0.89
b ₂	0.033	0.045	0.84	1.14
b ₃	0.205	0.215	5.21	5.46
c	0.018	0.024	0.46	0.61
D	0.235	0.245	5.97	6.22
D ₁	0.205	—	5.21	—
E	0.250	0.265	6.35	6.73
E ₁	0.190	—	4.83	—
e	0.090 BSC		2.29 BSC	
H	0.380	0.410	9.65	10.41
L	0.055	0.070	1.40	1.78
L ₂	0.020 BSC		0.51 BSC	
L ₃	0.035	0.050	0.89	1.27
L ₄	0.025	0.040	0.64	1.01
θ	0°	8°	0°	8°



OPTION 2



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.380	0.087	0.094
A1	0.000	0.100	0.000	0.004
b	0.710	0.810	0.028	0.032
c	0.460	0.560	0.018	0.022
D	6.500	6.700	0.256	0.264
D1	5.130	5.460	0.202	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.800	10.400	0.386	0.409
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	1.600 REF.		0.063 REF.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
A2	0.910	1.110	0.036	0.044
V	5.350 REF.		0.211 REF.	
D3	1.778 REF.		0.070 REF.	
h	0.762 REF.		0.030 REF.	
θ1	7°		7°	



OPTION 3

DPAK



Technical Data
Data Sheet N0338, Rev. -

Green Products

Marking Diagram:



Where XXXXX is YYWWL

MUR = Device Type
D = Package type
15 = Forward Current (15A)
60 = Reverse Voltage (600V)
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
MURD1560	DPAK (Pb-Free)	2500 pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings:

Characteristics	Symbol	Condition	Max.		Units
Peak Inverse Voltage	V_{RWM}	-	600		V
Max. Average Forward	$I_F (AV)$	50% duty cycle @Tc=100°C, rectangular wave form	15		A
Max. Peak One Cycle Non-Repetitive Surge Current (Per leg)	I_{FSM}	8.3ms, Half Sine pulse	$T_J = 45^\circ C$	110	A
			$T_J = 150^\circ C$	95	



Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F1}	@ 15A, Pulse, $T_J = 25^\circ\text{C}$	1.7	V
	V_{F2}	@ 15A, Pulse, $T_J = 150^\circ\text{C}$	1.5	V
Max. Reverse Current*	I_{R1}	@ $V_R = \text{rated } V_R$ $T_J = 25^\circ\text{C}$	50	μA
	I_{R2}	@ $V_R = \text{rated } V_R$ $T_J = 125^\circ\text{C}$	3	mA
Max. Reverse Recovery Time	t_{rr}	$I_F=500\text{mA}$, $I_R=1\text{A}$, and $I_{rm}=250\text{mA}$	50	ns

* Pulse width < 300 μs , duty cycle < 2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +150	$^\circ\text{C}$
Max. Storage Temperature	T_{stg}	-	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JA}$	DC operation	80	$^\circ\text{C/W}$
Approximate Weight	wt	-	0.39	g
Case Style	DPAK			

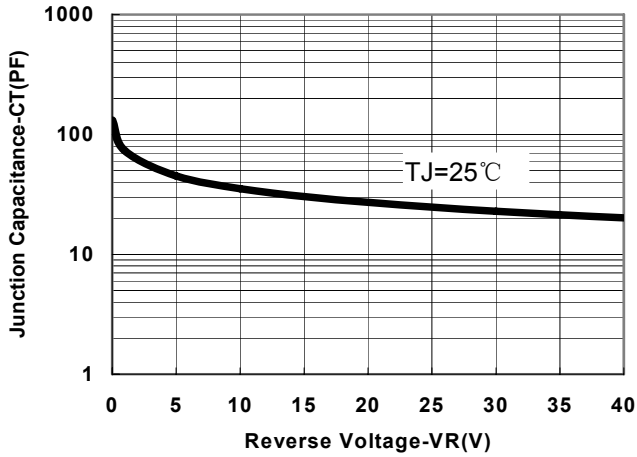


Fig.1-Typical Junction Capacitance

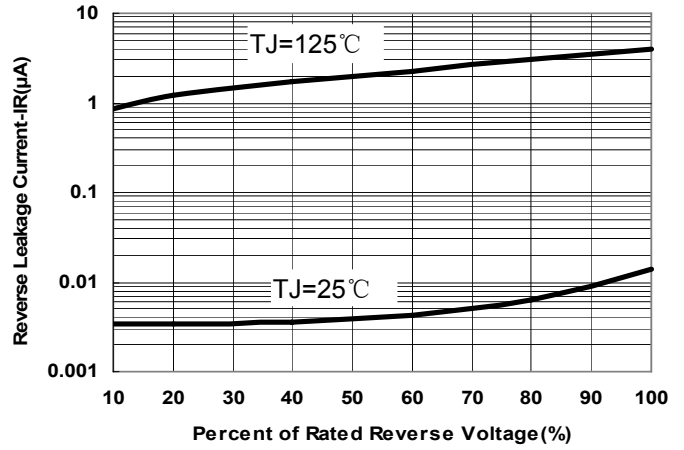


Fig.2-Typical Reverse Characteristics

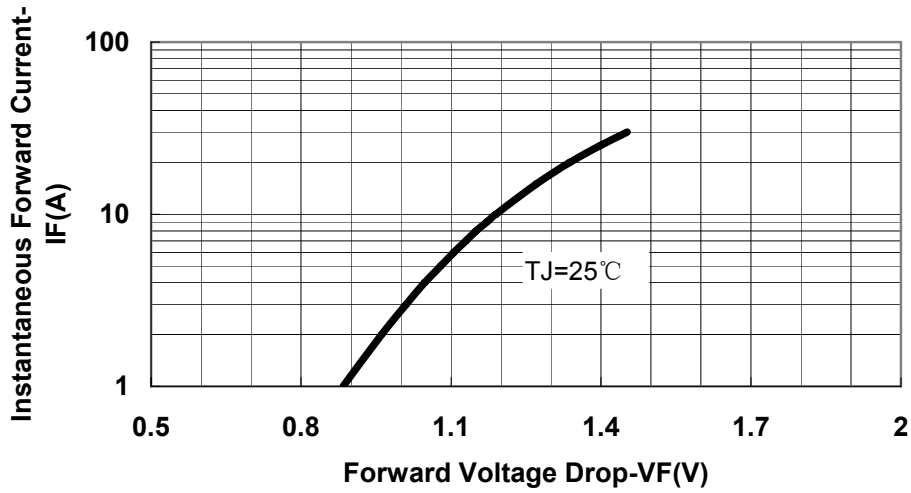


Fig.3-Typical Forward Voltage Drop Characteristics



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