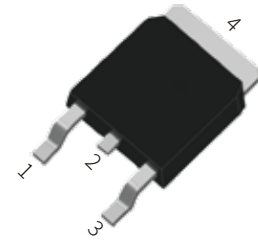


## FEATURES

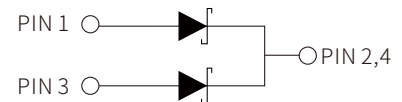
- | Construction Utilizes Void-free Molded Plastic Technique
- | Low Reverse Leakage
- | High Forward Surge Current Capability



TO-252

## MECHANICAL DATA

- | Case : Molded Plastic Body
- | Polarity : Polarity Symbol Marking on Body
- | Mounting Position : Any



Schematic Symbol

## APPROVALS

<b>RoHS</b>	Compliance with 2011/65/EU
<b>HF</b>	Compliance with IEC61249-2-21:2003

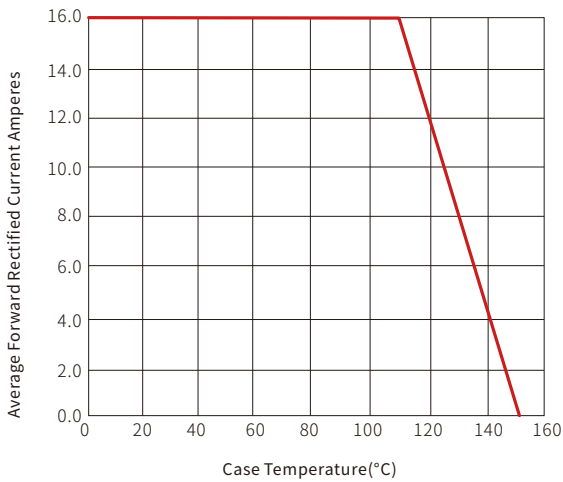
## MAXIMUM RATINGS (T<sub>A</sub>=25°C )

Parameter	Symbol	MUR1605 CD	MUR1610 CD	MUR1620 CD	MUR1640 CD	MUR1650 CD	MUR1660 CD	Unit
Marking		MUR1605 CD	MUR1610 CD	MUR1620 CD	MUR1640 CD	MUR1650 CD	MUR1660 CD	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	500	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	350	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	500	600	V
Maximum Average Forward Rectified Current At T <sub>c</sub> =110°C	per device	16.0						A
	per diode	8.0						
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	I <sub>FSM</sub>	100.0						A
Maximum Instantaneous Forward Voltage at 8.0A	V <sub>F</sub>	1.0		1.3	1.7		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>A</sub> =25°C	5						mA
	T <sub>A</sub> =125°C	200						mA
Typical Thermal Resistance	R <sub>θJC</sub>	2.5						°C/W
Maximum reverse recovery time	T <sub>rr</sub>	35						ns
Operating Junction And Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150						°C

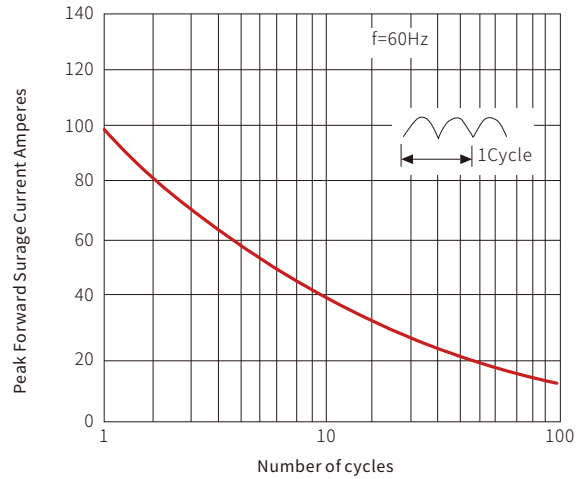
Note:1.Reverse recovery time test condition: IF=0.5A IR=1.0A I<sub>rr</sub>=0.25A

# CHARACTERISTIC CURVES

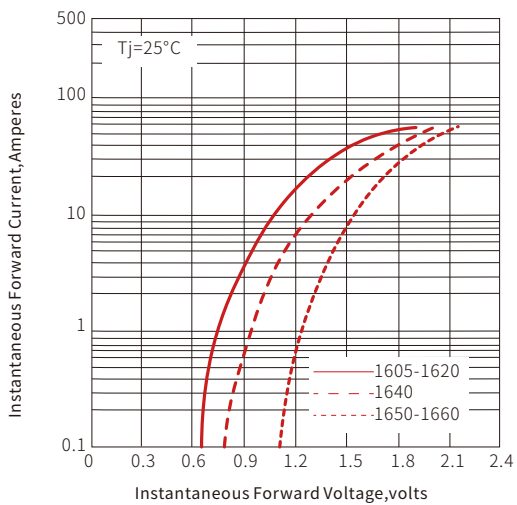
**Fig.1 -Derating Curve Output Rectified Current**



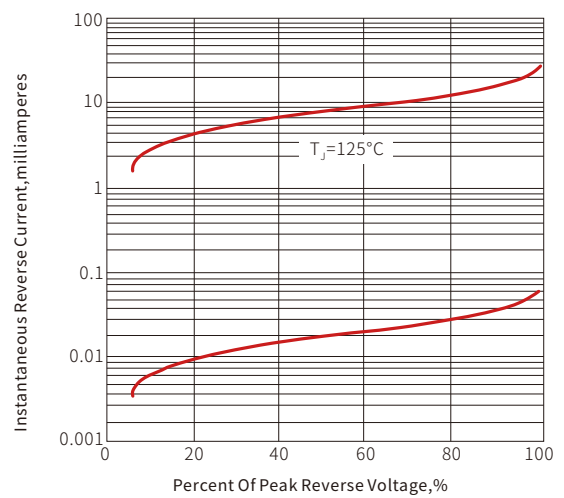
**Fig.2 -Maximum Non-Repetitive Peak Forward Surge Current Perleg**



**Fig.3 -Typical Forward Voltage Characteristics**

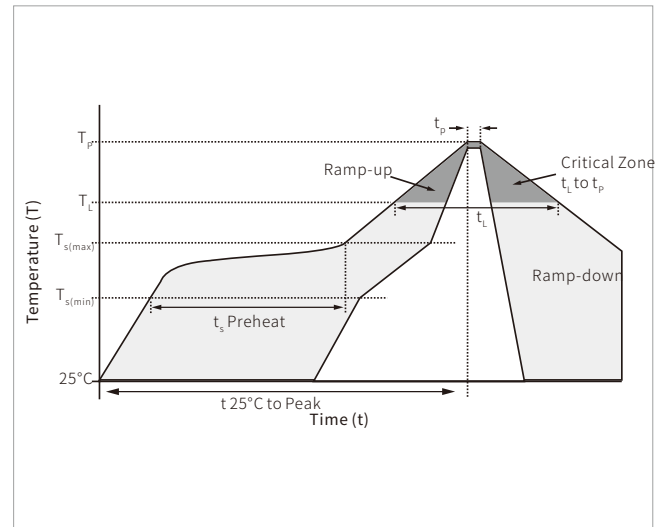


**Fig.4 -Typical Reverse Leakage Characteristics**

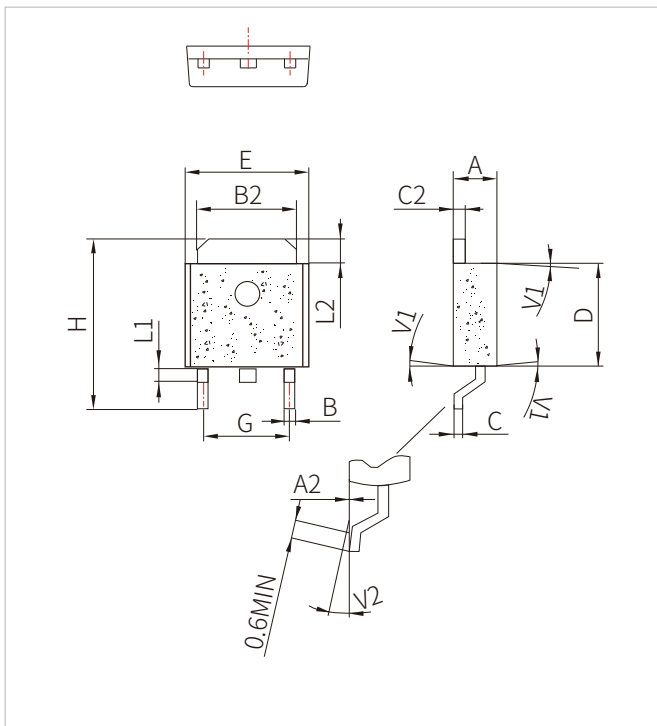


## SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ( $T_{s(min)}$ )	150°C
	Temperature Max ( $T_{s(max)}$ )	200°C
	Time (min to max) ( $t_s$ )	60 – 180 secs
Average ramp up rate (Liquidus Temp ( $T_L$ ) to peak)		3°C/second max
$T_{s(max)}$ to $T_L$ - Ramp-up Rate		3°C/second max
Reflow	Temperature ( $T_L$ ) (Liquidus)	217°C
	Time (min to max) ( $t_L$ )	60 – 150 seconds
Peak Temperature ( $T_p$ )		260°C
Time within 5°C of actual peak Temperature ( $t_p$ )		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature ( $T_p$ )		8 minutes max.
Do not exceed		260°C



## TO-252 PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.10		2.50	0.083		0.098
A2	0.03		0.23	0.001		0.009
B	0.50		1.00	0.020		0.039
B2	5.10		5.40	0.200		0.213
C	0.45		0.62	0.018		0.024
C2	0.48		0.62	0.019		0.024
D	5.30		6.40	0.209		0.252
E	6.10		6.80	0.240		0.268
G	4.40		4.70	0.173	0.1	0.185
H	9.35		10.7	0.368		0.421
L1	1.30		1.70	0.051	0.143	0.067
L2	1.37		1.50	0.054		0.059
V1		4°			0.130	
V2	0°		8°	0°		8°

## ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
MUR1605CD-MUR1660CD	TO-252	2500PCS	13"

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Wechat

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