

MSCD032H THRU MSCD036H

FEATURES

- * Halogen-free type
- * Compliance to RoHS product
- * Lead less chip form, no lead damage
- * Low power loss, High efficiency
- * High current capability, low VF
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0

APPLICATION

- * Switching mode power supply applications
- * Portable equipment battery applications
- * High frequency rectification
- * DC / DC Converter
- * Telecommunication

MECHANICAL DATA

Case : Packed with FRP substrate and epoxy underfilled

Terminals : Pure Tin plated (Lead-Free),
solderable per MIL-STD-750, Method 2026.

Polarity : Laser Cathode band marking

Weight : 0.005 gram

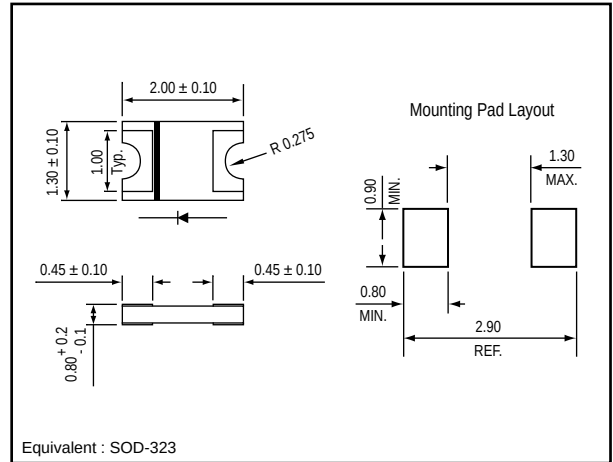
PACKING

- * 3,000 pieces per 7" (178mm ± 2mm) reel
- * 5 reels per box
- * 6 boxes per carton

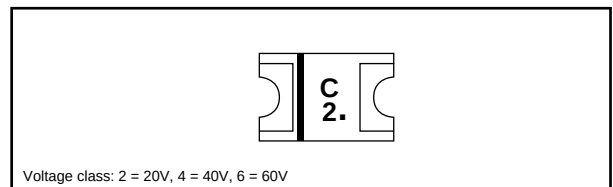
OUTLINE DIMENSIONS

Case : 0805

Unit : mm



MARKING



Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating			Unit
			MSCD032H	MSCD034H	MSCD036H	
Repetitive peak reverse voltage	VRRM		20	40	60	V
Average forward current	IF(AV)		300			mA
Peak forward surge current	IFSM	8.3ms single half sine-wave	2.0			A
Junction temperature	Tj		125			°C
Operating temperature range	Topr		-40 to +125			°C
Storage temperature Range	TSTG		- 40 to +125			°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Type	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 100mA	MSCD032H / MSCD034H	-	0.42	-	V
		IF = 300mA		-	0.47	0.50	
		IF = 100mA	MSCD036H	-	0.45	-	
		IF = 300mA		-	0.60	0.65	
Repetitive peak reverse current	IRRM	VR = Max. VRRM , Ta = 25 °C		-	8	50	uA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz		-	30	-	pF
Thermal resistance	Rth(JA)	Junction to ambient		-	160	-	°C/W
	Rth(JL)	Junction to lead		-	110	-	°C/W

FIG. 1 - TYPICAL FORWARD CURRENT
DERATING CURVE

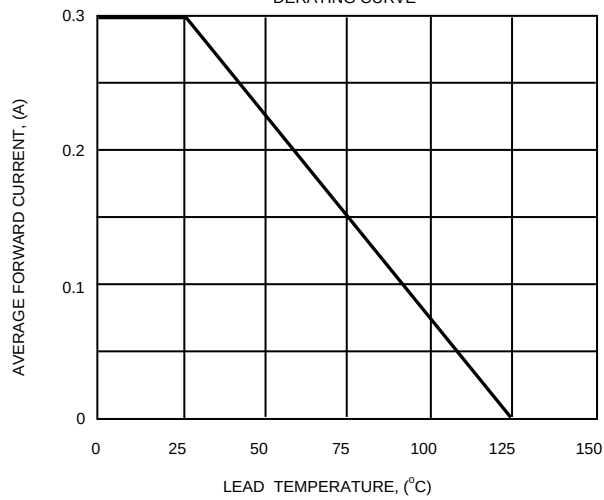


FIG. 2 - MAXIMUM NON-REPETITIVE
PEAK FORWARD SURGE CURRENT

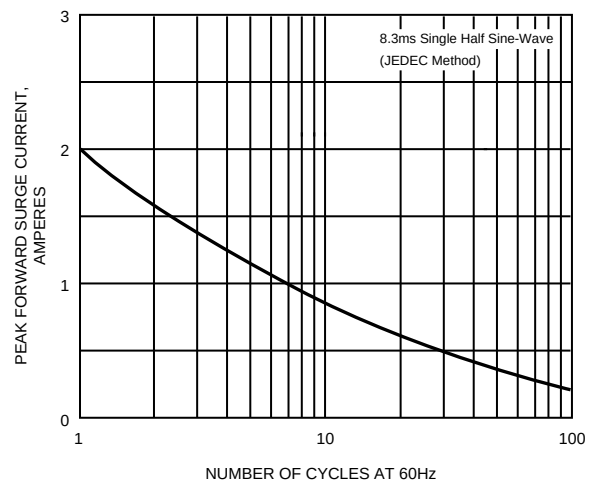


FIG. 3 - TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

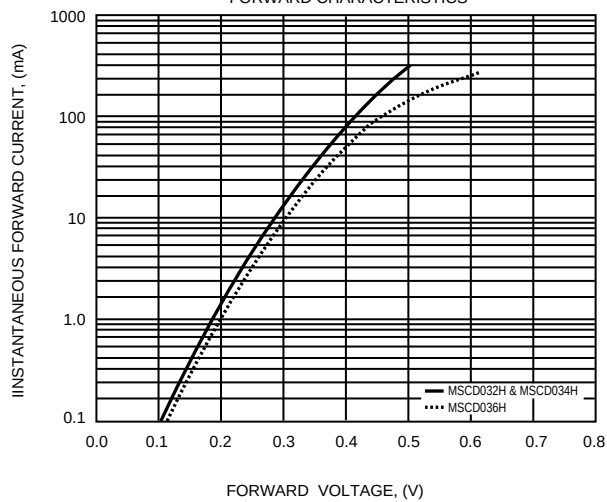


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

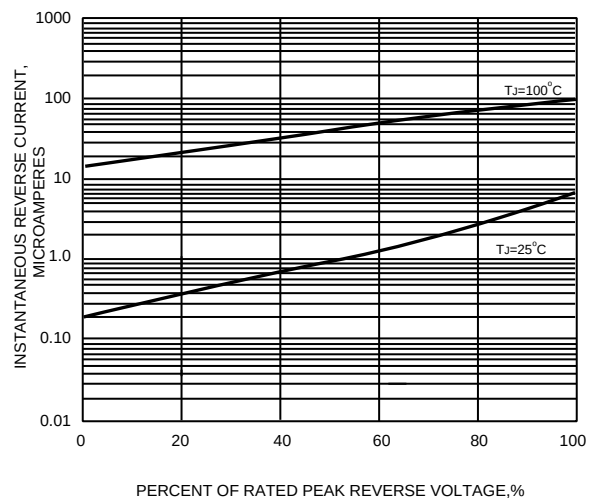


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

